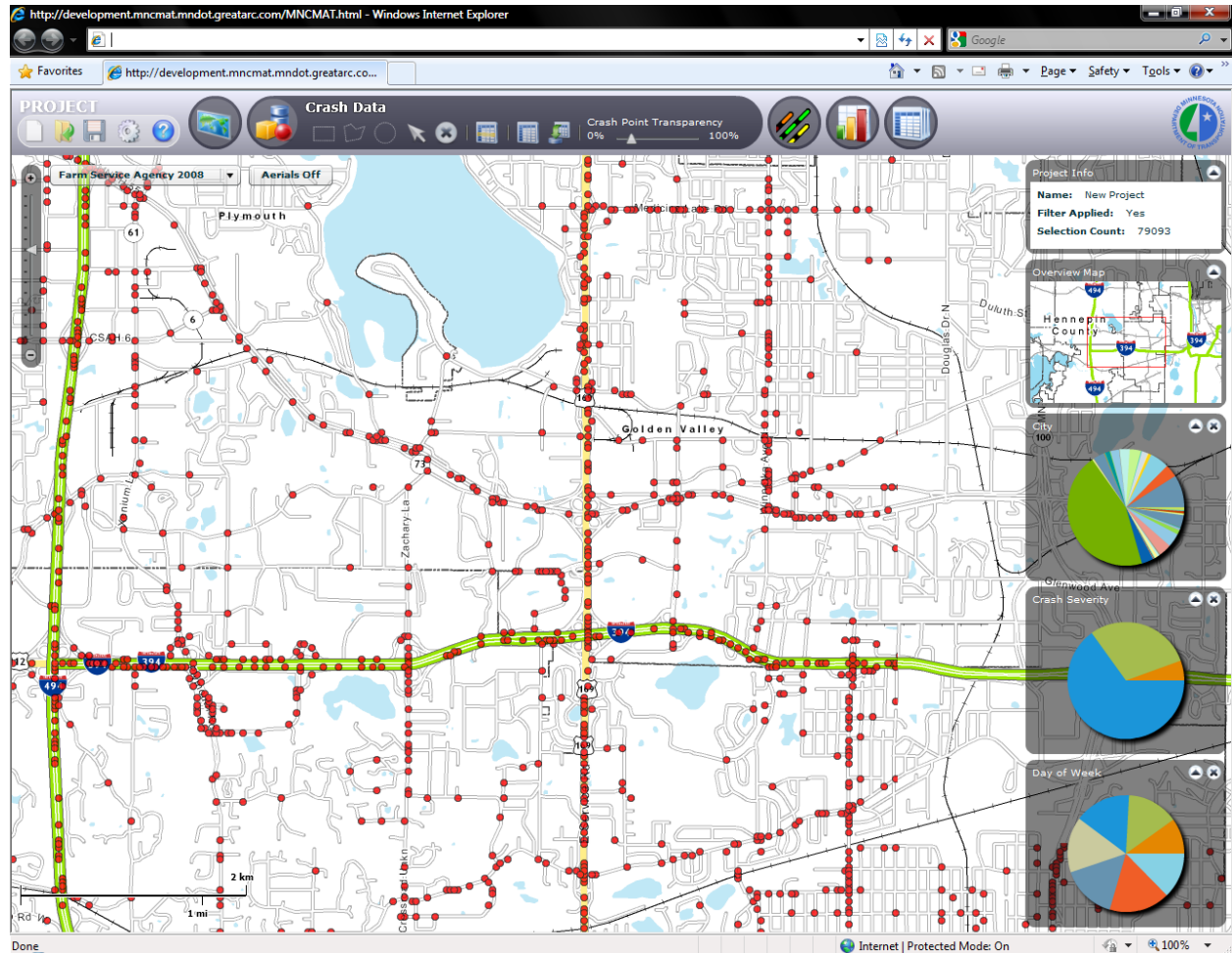


## Mn/DOT MnCMAT Crash Analysis Application Help



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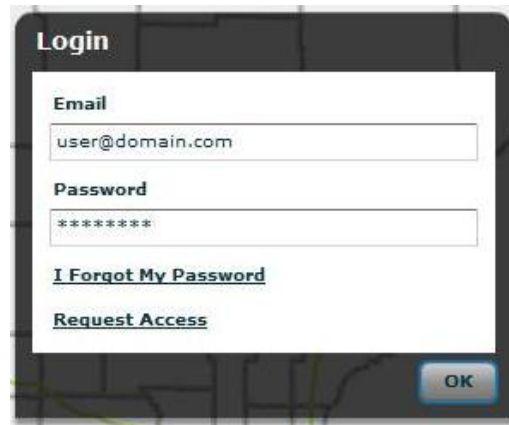
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## MnCMAT Crash Analysis Application

### Login

#### User Login Dialog

The User Login Dialog provides access to the Crash Analysis application to authorized users. This is the first screen you see upon launching the application



*Login Dialog*

#### Login

To log in, enter your email address in the Email box, and enter your password in the Password box. Then click OK.

#### New User

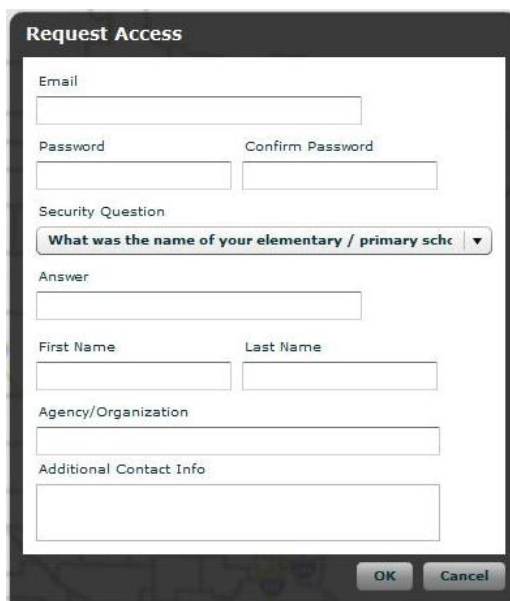
If you are new to the system, and need to request access, click the [Request Access](#) link.

#### Forgotten Password

If you cannot remember your password, enter your email address in the Email box, and click the [I Forgot My Password](#) link.

#### Request Access Dialog

This dialog provides new users with a form for applying for access to the Crash Analysis application.

A screenshot of the 'Request Access' dialog box. It features a dark gray title bar with the text 'Request Access'. The main area is white and contains several input fields: 'Email' (a single line), 'Password' and 'Confirm Password' (two side-by-side lines), 'Security Question' (a dropdown menu with the text 'What was the name of your elementary / primary school' and a downward arrow), 'Answer' (a single line), 'First Name' and 'Last Name' (two side-by-side lines), 'Agency/Organization' (a single line), and 'Additional Contact Info' (a larger text area). At the bottom right, there are two buttons: 'OK' and 'Cancel'.

Request Access Dialog

Enter your email address in the Email box.

Choose your password and enter it in the Password box; then re-type it into the Confirm Password box.

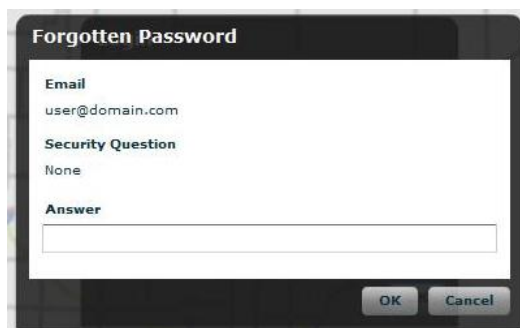
Choose your Security Question from the drop-down list of questions, then enter the answer in the Answer box.

Provide your First and Last Name, Agency/Organization, and Additional Contact Info in the boxes provided.

Click OK to submit the request access information; click Cancel to return to the previous dialog.

### Forgotten Password Dialog

This dialog displays your email address and your Security Question. Enter the answer to your Security Question in the Answer box and click OK. To go back to the previous dialog, click Cancel.

A screenshot of the 'Forgotten Password' dialog box. It features a dark gray title bar with the text 'Forgotten Password'. The main area is white and contains three input fields: 'Email' (a single line with the text 'user@domain.com'), 'Security Question' (a dropdown menu with the text 'None' and a downward arrow), and 'Answer' (a single line). At the bottom right, there are two buttons: 'OK' and 'Cancel'.

Forgotten Password Dialog

## Create/Open Project

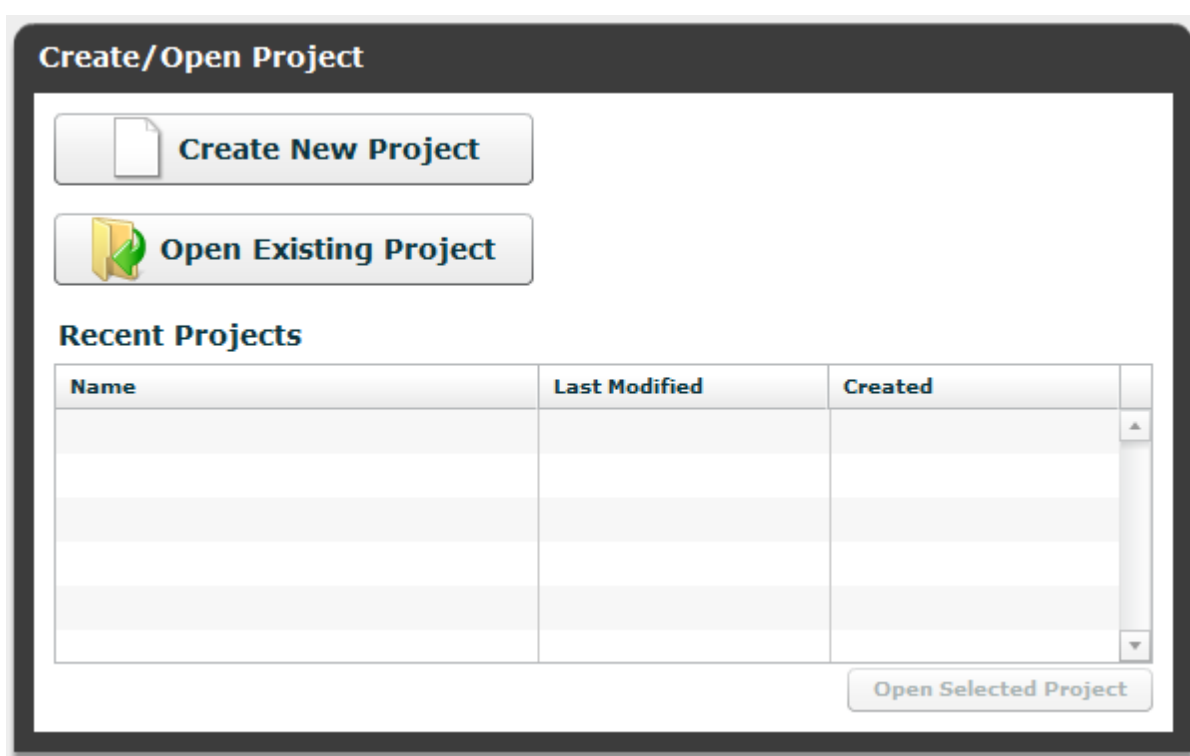
When you begin a Crash Analysis session, the system will prompt you to create a new project or open an existing project. If you are using the application for the first time, you will create a new project. This functionality can also be accessed during a Crash Analysis session through the Project Toolbar.

### Create/Open Project Dialog

Click on the Create New Project button to launch the new Project Dialog.

Click on the Open Existing Project to launch the Open Project Dialog.

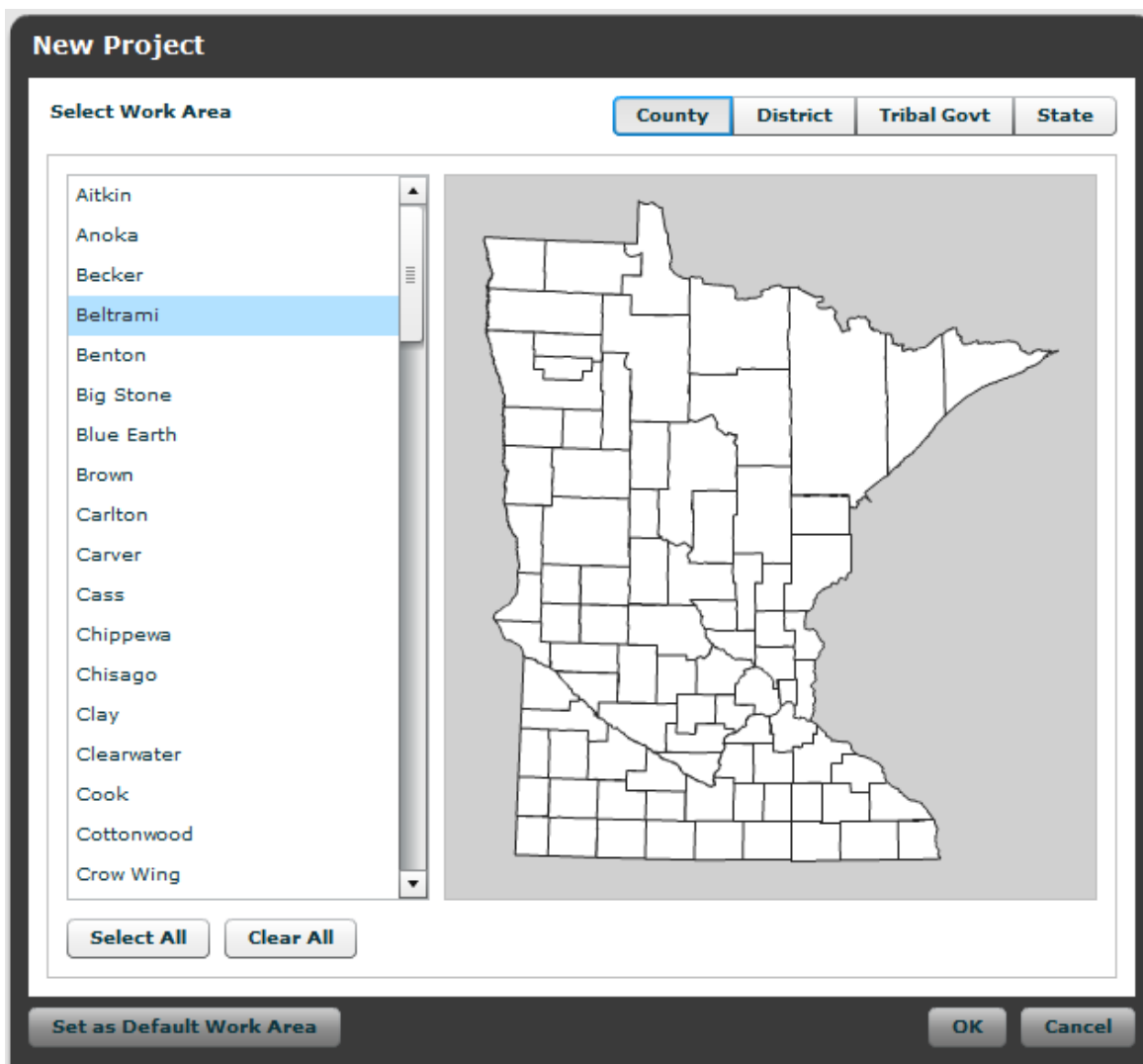
Select the Name of a Recent Project and then click on Open Selected Project button to open an existing Project.



*Create/Open Project Dialog*

### New Project Dialog

The New Project Dialog allows users to create a New Project based on County, Mn/DOT District, Tribal Government, or State. Details of this can be found in the Project Toolbar Section of this document.

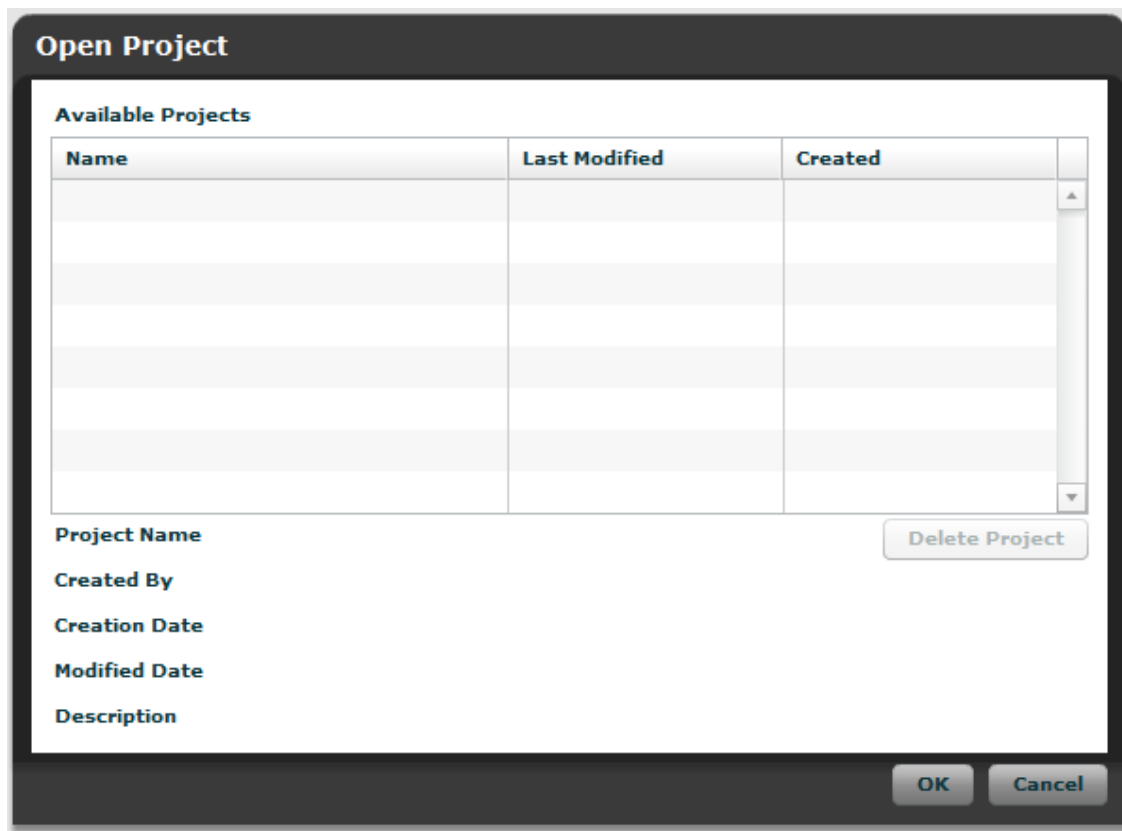


*New Project Dialog*

### Open Project Dialog

The Open Project Dialog allows users to create Open a Project that they have currently saved. Details of this can be found in the Project Toolbar Section of this document.



*Open Project Dialog*

## Project Toolbar

The Project Toolbar provides tools to create, open, and save Crash Analysis projects.



*Project Tool Bar*

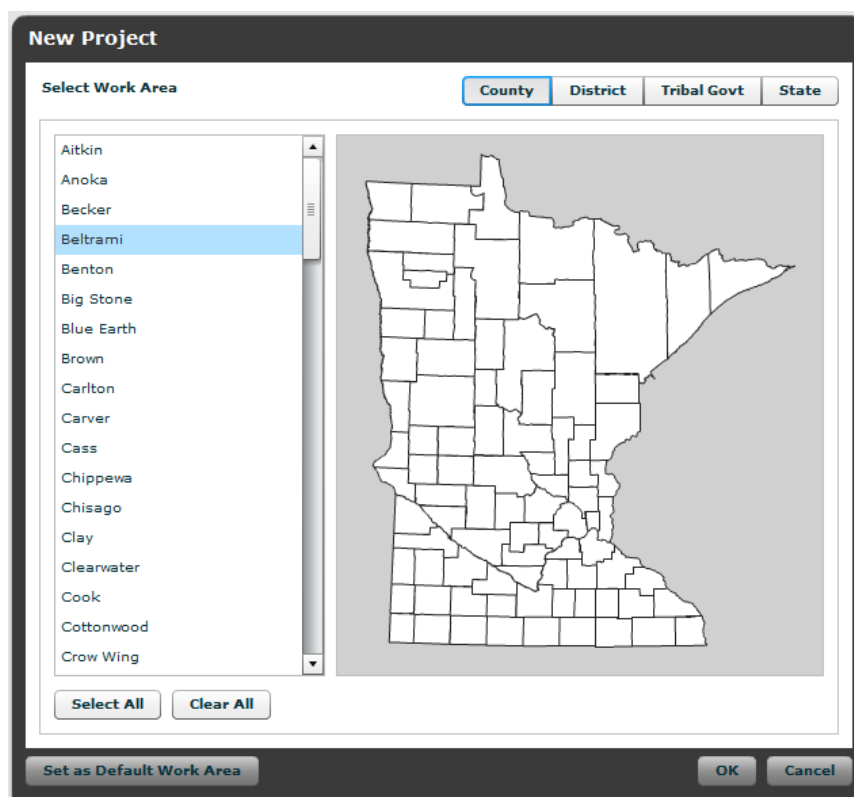
## Create New Project



*Create New Project Button*

Click the Create New Project button to begin with a new project. The New Project dialog window will open, and the application will prompt you to select the work area for the project. The work area can be a selection of counties, a selection of MnDOT districts, or the entire state.

The work area for the current project can be selected using the three selection buttons at the upper right of the dialog: County, Mn/DOT District, Tribal Government, and State.



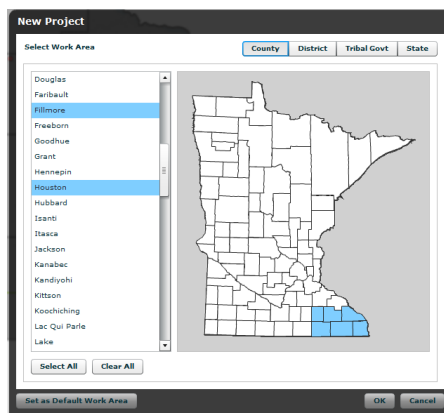
*New Project Dialog*

## County



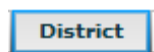
*County Work Area Button*

Click the County button to select by county. You can click on the map to select/unselect counties, or you can click the name of desired counties in the list at the left side of the panel. To quickly select all counties or clear the selected counties, use the Select All or Clear All buttons at the bottom of the panel.



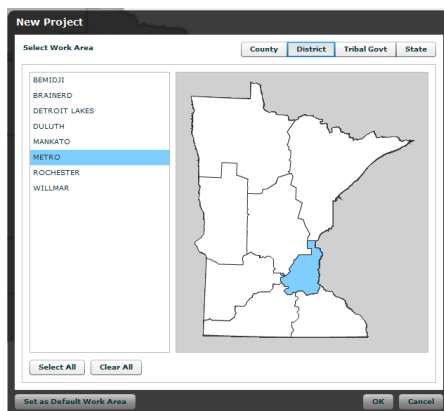
*County Work Area*

## MnDOT District



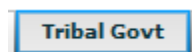
*Mn/DOT District Button*

Click the MnDOT District button to select by District. You can click on the map to select/unselect districts, or you can click the name of desired districts in the list at the left side of the panel. To quickly select all districts or clear the selected districts, use the Select All or Clear All buttons at the bottom of the panel.



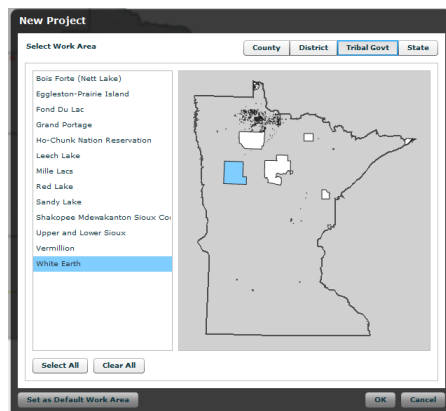
*Mn/DOT District Work Area*

## Tribal Government



*Tribal Government Button*

Click the Tribal Govt button to select by Tribal Government. You can click on the map to select/unselect Tribal Government Areas, or you can click the name of desired Area in the list at the left side of the panel. To quickly select all districts or clear the selected districts, use the Select All or Clear All buttons at the bottom of the panel.



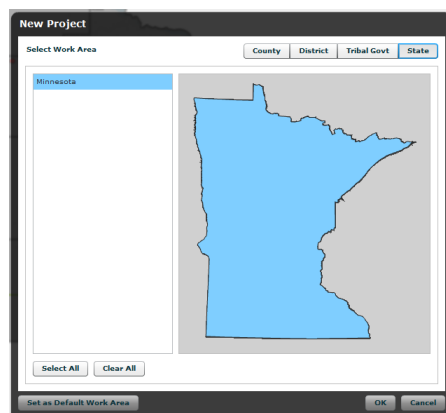
*Tribal Government Work Area*

## State



*State Button*

Click the State button to select by State. You can click on the map to select/unselect the state, or you can click the name of the state in the list at the left side of the panel.



*State Work Area*

## *Set as Default Work Area*



*Set Default Work Area Button*

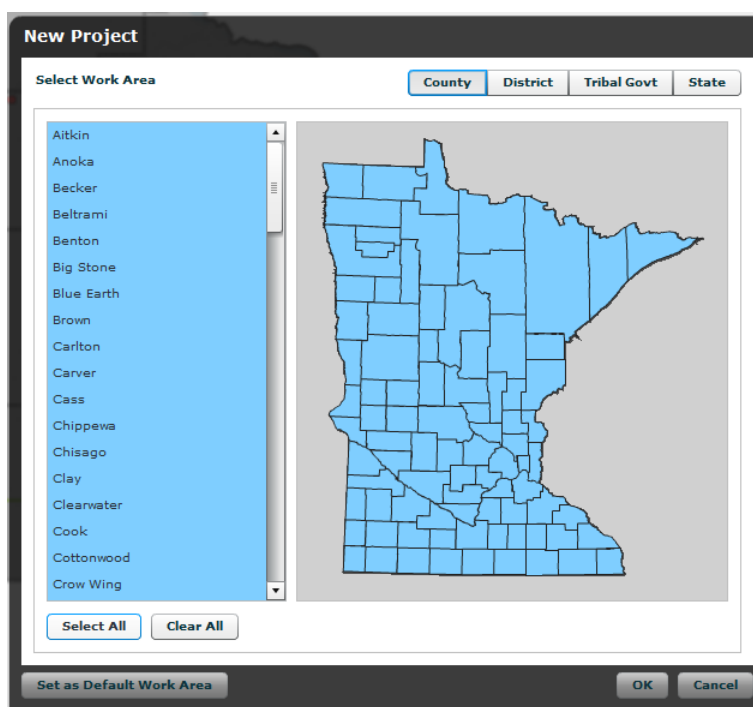
When you have selected the desired work area, you have the option to make the work area the default selection each time you open the application. To do this, click the Set as Default Work Area button at the bottom of the dialog.

## *Select All*



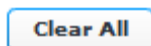
*Select All Button*

The Select All button allows the selection of all the features in the chosen work area.



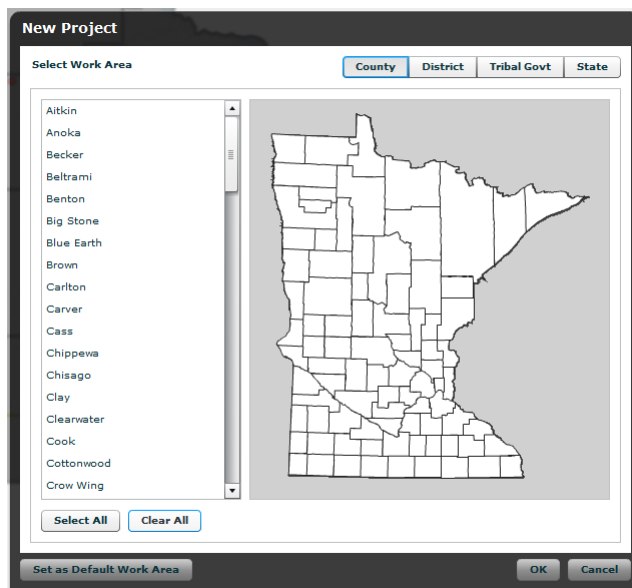
*New Project - Select All*

## *Clear All*



*Clear All Button*

The Clear All button will unselect any features that have been selected for a chosen Work Area.



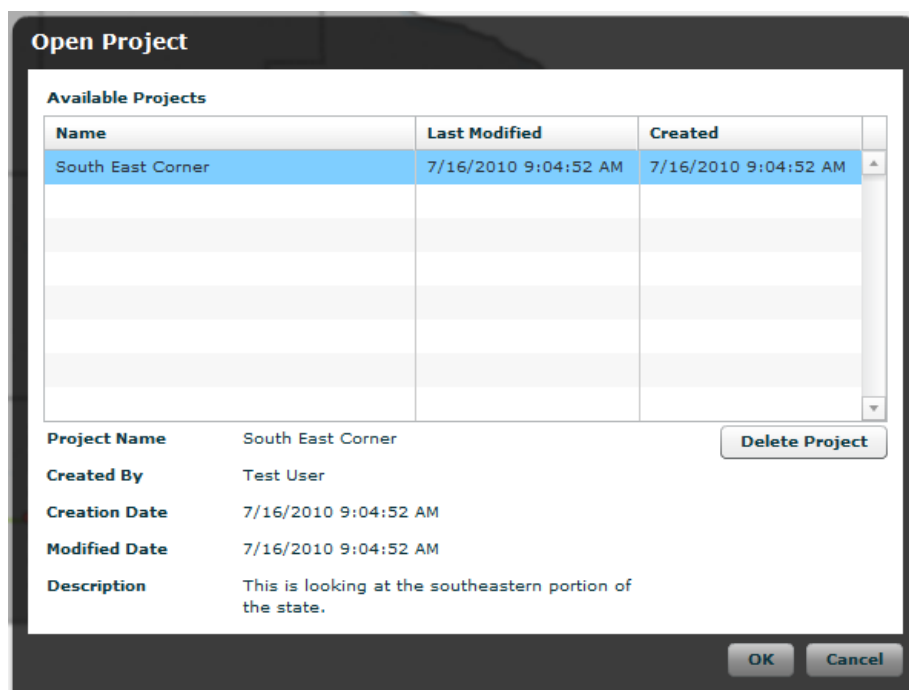
*New Project - Clear All*

## Open Existing Project



*Open Project Button*

The Open Project dialog shows a list of Available Projects and the date they were created and last modified.



*Open Project Dialog*

Click the desired project name to view additional information about the project, including the name of the person who created the project and the project description.

Click OK to open the selected project.

You can also delete projects from this dialog by clicking a project name and clicking the Delete Project button.



*Delete Project Button*

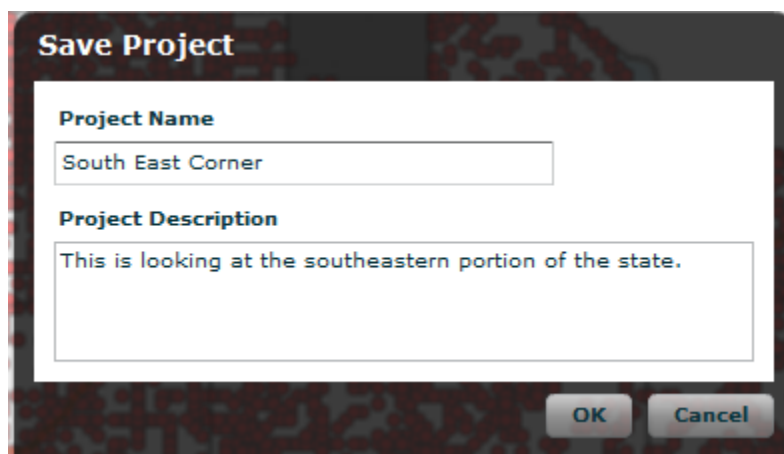
To exit this dialog without opening a new project, click Cancel.

## Save Current Project



*Save Project Button*

Click the Save Current Project tool to save your current session. The Save Project dialog allows you to enter a Project Name and Description. Click OK to Save the Project, and to return to your project without saving, click Cancel.



*Save Project Dialog*

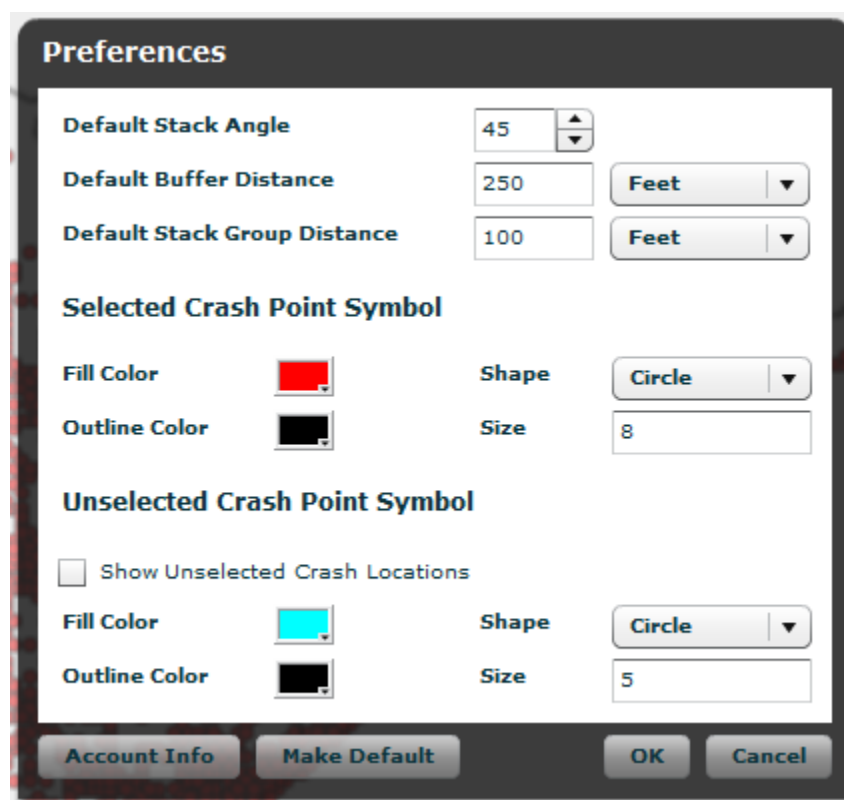
## Project Preferences



*Project Preferences Button*

The Project Preferences tool allows you to control the look and feel of the Crash Analysis application. You can set the following preferences:

- Default Stack Angle - in 5-degree increments
  - Default Buffer Distance - in meters, feet, miles, or kilometers
  - Default Stack Group Distance - in meters, feet, miles, or kilometers
  - Selected Crash Point Symbol - change the fill and outline colors as well as the symbol and size
  - Unselected Crash Point Symbol - change the fill and outline colors as well as the symbol and size.
- Note that the Unselected Crash Points are Off by default.

The image shows a 'Preferences' dialog box with a dark title bar. It contains several sections: 'Default Stack Angle' with a numeric input set to 45 and a spin button; 'Default Buffer Distance' with a numeric input set to 250 and a unit dropdown set to 'Feet'; 'Default Stack Group Distance' with a numeric input set to 100 and a unit dropdown set to 'Feet'; 'Selected Crash Point Symbol' with 'Fill Color' (red), 'Outline Color' (black), 'Shape' (Circle), and 'Size' (8); and 'Unselected Crash Point Symbol' with a 'Show Unselected Crash Locations' checkbox (unchecked), 'Fill Color' (cyan), 'Outline Color' (black), 'Shape' (Circle), and 'Size' (5). At the bottom are buttons for 'Account Info', 'Make Default', 'OK', and 'Cancel'.

*Project Preferences Dialog*

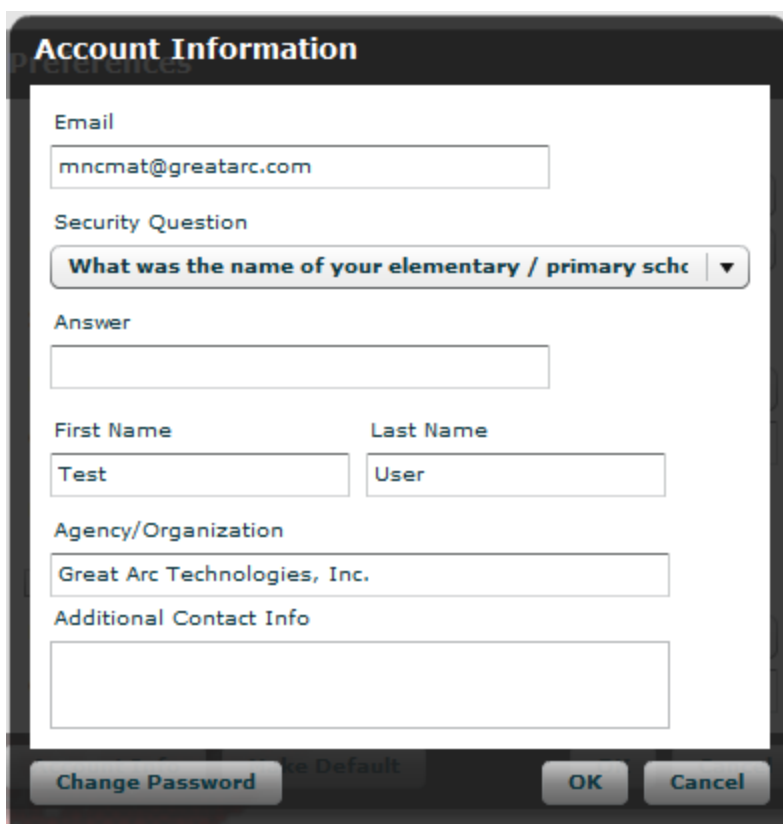
## Account Info



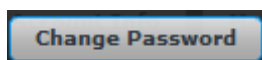
*Account Info Button*

Additionally, you can change your Account Information by clicking the Account Info button. All of the user information is displayed and is updatable in this dialog. After any changes are made, click the OK button.

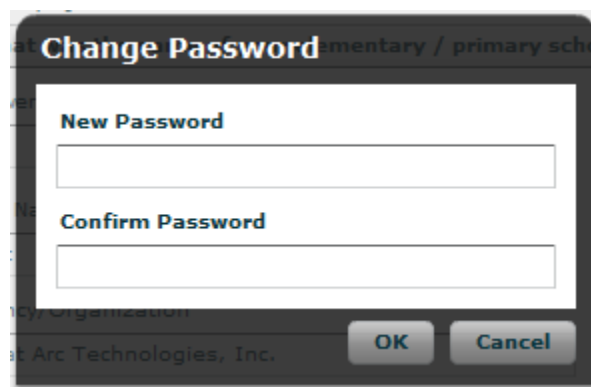


A screenshot of the 'Account Information' dialog box. It has a title bar with 'Account Information' and a close button. The dialog contains several input fields: 'Email' with the value 'mncmat@greatarc.com', 'Security Question' with a dropdown menu showing 'What was the name of your elementary / primary sch...', 'Answer' (empty), 'First Name' with 'Test', 'Last Name' with 'User', 'Agency/Organization' with 'Great Arc Technologies, Inc.', and 'Additional Contact Info' (empty). At the bottom, there are four buttons: 'Change Password', 'Make Default', 'OK', and 'Cancel'.*Account Information Dialog*

### *Change Password*

*Change Password Button*

You can change your Password by clicking the Change Password button. Once a new password has been entered and confirmed, click the OK button.

A screenshot of the 'Change Password' dialog box. It has a title bar with 'Change Password' and a close button. The dialog contains two input fields: 'New Password' and 'Confirm Password', both of which are empty. At the bottom, there are two buttons: 'OK' and 'Cancel'.*Change Password Dialog*

## Make Default



*Make Default Button*

If you make changes and click OK, the changes will be in effect for the current project; if you click the Make Default button, the preferences will become the default for any projects you create.

## Help



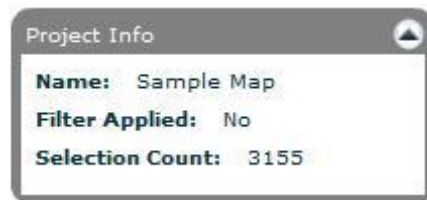
*Help Button*

Clicking the Help button will launch the help system for the MnCMAT Application

## Map and Project Widgets

### Project Info Widget

This widget displays information about the current project, including name, whether a filter is currently applied, and selection count. You may toggle the display of this widget by clicking the arrow in the upper right.



*Project Info Widget*

### Overview Map Widget

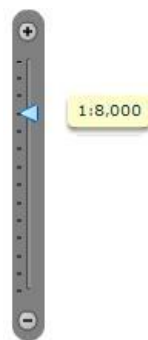
This widget displays an overview map of the current map display area. You may toggle the display of this widget by clicking the arrow in the upper right.



*Overview Map Widget*

### Zoom Slider

On the left side of the map display, the zoom slider shows your current zoom level. There are fourteen zoom scales at which the map can be displayed, ranging from 1:8,000,000 to 1:1,000. You can zoom in one scale level by clicking the plus button at the top of the scale bar; you can zoom out one scale level by clicking the minus button. Additionally, you can dynamically select the zoom level by clicking and dragging the zoom pointer to the desired zoom level.

*Zoom Slider*

## Scale Bar

The Scale Bar appears in the lower left corner of the map. It will display the current map units dynamically based on the map scale.

*Scale Bar*

## Aerial Photos Toggle

*Aerial Photos Toggle*

Aerial photos can be toggled on or off using the button on the upper left of the map display. There are three options of aerial photography available for viewing in the application which are selected using the drop-down list: Farm Service Agency 2008, Farm Service Agency 2003, and 1998 Digital Orthophoto Quads.

## Map Toolbar



*Map Toolbar*

There are a variety of ways to navigate the map display using the tools on the Map Toolbar.

### Zoom In



*Zoom In Button*

The Zoom In tool allows you to zoom in on the map display in one of two ways. You can make a single click to zoom in to the next zoom level, or you can click and drag a box to zoom in dynamically. Note: if your mouse is equipped with a scroll wheel, you can zoom in using the scroll wheel regardless of the current tool.

### Zoom Out



*Zoom Out Button*

The Zoom Out tool allows you to zoom out on the map display in one of two ways. You can make a single click to zoom out to the next zoom level, or you can click and drag a box to zoom out dynamically. Note: if your mouse is equipped with a scroll wheel, you can zoom out using the scroll wheel regardless of the current tool.

### Pan



*Pan Button*

The Pan tool allows you to click and drag the map display without changing the zoom scale. If you make a single click, the map will re-center at the chosen point. You can also click and drag to dynamically pan the map display.

### Zoom Previous



*Zoom Previous Button*

The Crash Analysis application remembers the recent zoom extents for your current session. Clicking the Zoom Previous button returns you to the last zoom extent in memory.

## Zoom Next



*Zoom Next Button*

If you use the Zoom Previous tool to return to a previous zoom extent, you can then use the Zoom Next button to go to the next stored zoom extent in memory.

## Zoom Extent



*Zoom Extent Button*

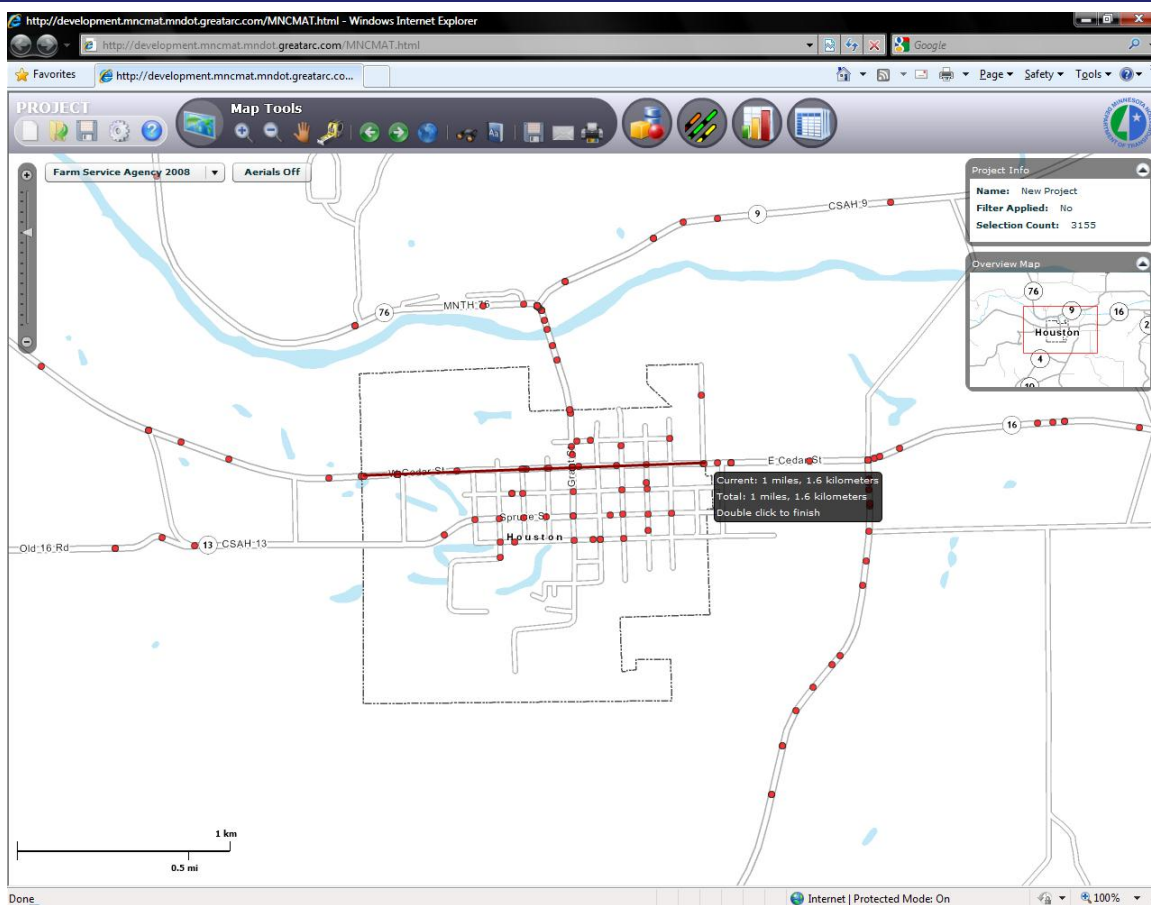
The Zoom Extent button zooms you to the full extent of your chosen work area.

## Measure



*Measure Button*

The Measure tool allows you to get point-to-point distances on the map, as well as cumulative distance for the current measurement. To begin, click the Measure button. Then, click on the map. A text box will follow your cursor, displaying the current distance as well as the total distance in miles and kilometers. You can click as many points as you like. Double-click to end the measure tool.



*MnCMAT Application with Measure Tool Active*

## Find Location



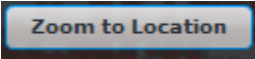

*Find Location Button*

The Find Location tool allows you to search for locations using County, Municipality, Intersection, Crash Number, or XY Coordinate.

To begin, click the Find Location button. The Find Location dialog displays. Then, click on the desired search criteria bar (County, Municipality, etc.).

The method of searching will vary depending on the search criteria chosen; user input is entered using either drop-down menus or text boxes. For the Find Location options with a drop down menu, the choices are driven by the chosen work area.

To zoom to a location, enter or selection your desired search and click Zoom to Location Button. To close the dialog without zooming, click the Close Button

A rectangular button with a blue gradient and a black border, containing the text "Zoom to Location" in black.*Zoom to Location Button*A dark-themed dialog box titled "Find Location". It contains several input fields: "County" with a dropdown menu showing "HOUSTON", "Municipality", "Intersection", "Crash Number", and "XY Coordinate". At the bottom, there are two buttons: "Zoom to Location" and "Close".

County
HOUSTON

Municipality
--------------

Intersection
--------------

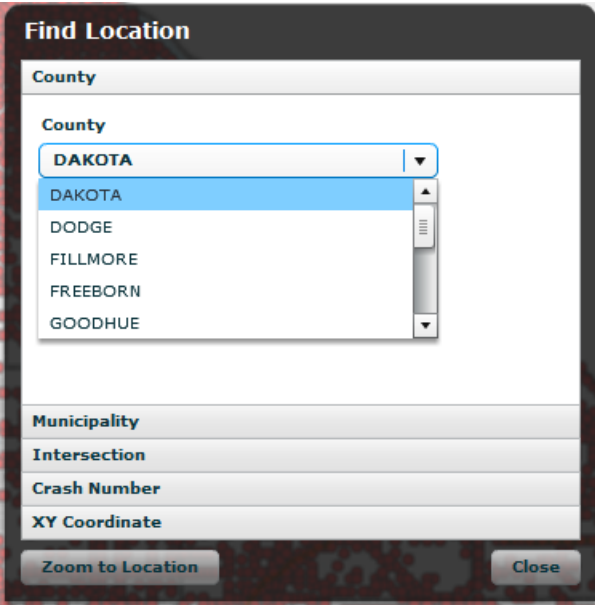
Crash Number
--------------

XY Coordinate
---------------

*Find Location Dialog*

### Find County

One of the options in the Find Location is County. Click the arrow next to the drop down to choose a County.

The "Find Location" dialog box with the "County" dropdown menu open. The dropdown list shows "DAKOTA" selected (highlighted in blue), followed by "DODGE", "FILLMORE", "FREEBORN", and "GOODHUE".

County
DAKOTA
DAKOTA
DODGE
FILLMORE
FREEBORN
GOODHUE

Municipality
--------------

Intersection
--------------

Crash Number
--------------

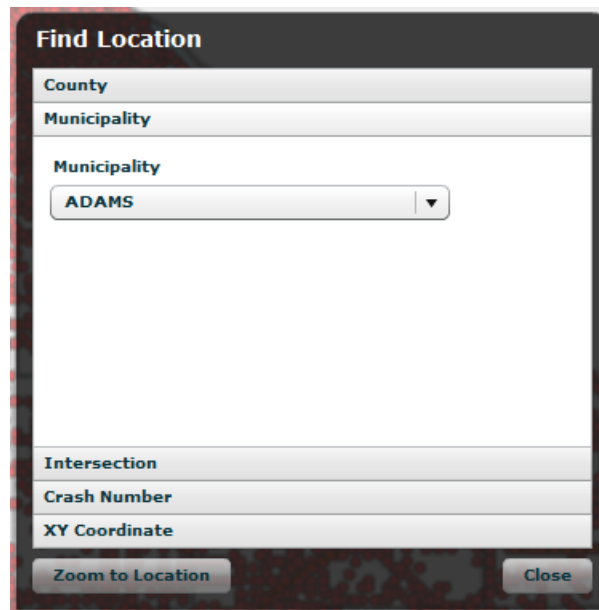
XY Coordinate
---------------

*Find Location Dialog –County*



## Find Municipality

Click the Municipality bar and then choose the Municipality Name to Find.

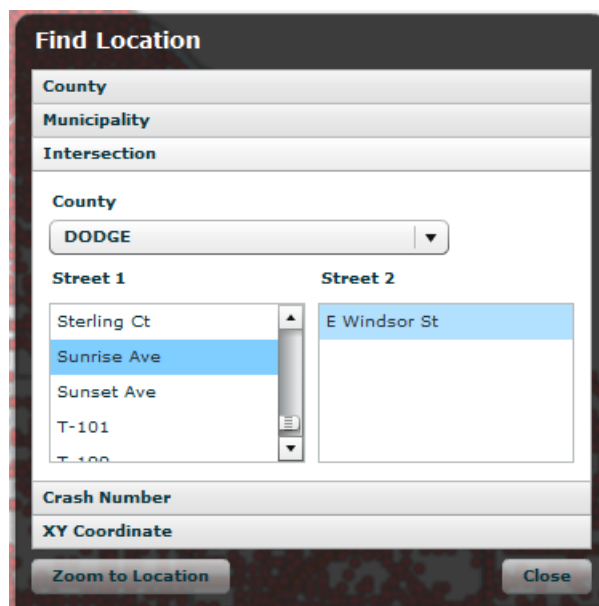


The 'Find Location' dialog box is shown with the 'Municipality' tab selected. It features a 'County' bar at the top, followed by the 'Municipality' bar. Below this is a dropdown menu for 'Municipality' with 'ADAMS' selected. At the bottom, there are three bars for 'Intersection', 'Crash Number', and 'XY Coordinate'. Two buttons, 'Zoom to Location' and 'Close', are at the bottom right.

Find Location Dialog – Municipality

## Find Intersection

Click the Intersection bar and then choose the County as an area of interest. Once the County is chosen, choose Street 1. This will then populate Street 2, and then choose the desired street in Street 2.

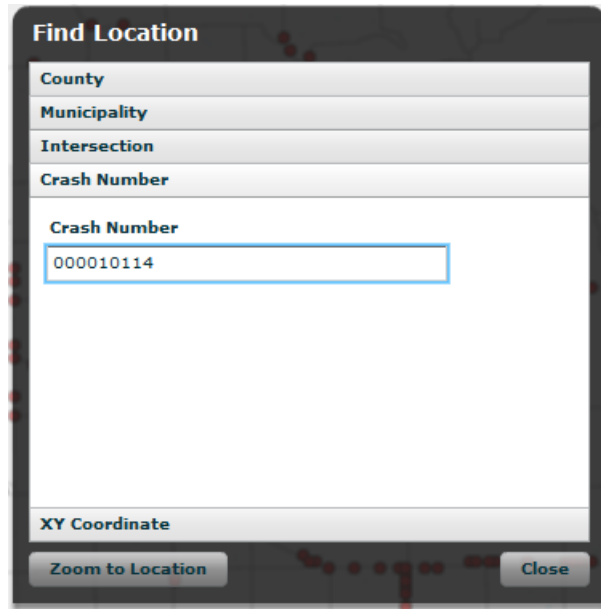


The 'Find Location' dialog box is shown with the 'Intersection' tab selected. It features a 'County' bar at the top, followed by the 'Municipality' bar. Below this is a dropdown menu for 'County' with 'DODGE' selected. Under the 'Intersection' section, there are two columns: 'Street 1' and 'Street 2'. 'Street 1' has a list of streets: Sterling Ct, Sunrise Ave (highlighted), Sunset Ave, T-101, and T-100. 'Street 2' has a list with 'E Windsor St' highlighted. At the bottom, there are three bars for 'Crash Number', 'XY Coordinate', and two buttons, 'Zoom to Location' and 'Close'.

Find Location Dialog – Intersection

## Find Crash Number

To Find a Crash Location, a valid Crash Number needs to be entered.

A screenshot of the 'Find Location' dialog box. It features a dark grey header with the title 'Find Location'. Below the header are five stacked input fields: 'County', 'Municipality', 'Intersection', 'Crash Number', and 'XY Coordinate'. The 'Crash Number' field is currently selected and contains the text '000010114'. At the bottom of the dialog are two buttons: 'Zoom to Location' on the left and 'Close' on the right.

County

Municipality

Intersection

Crash Number
000010114

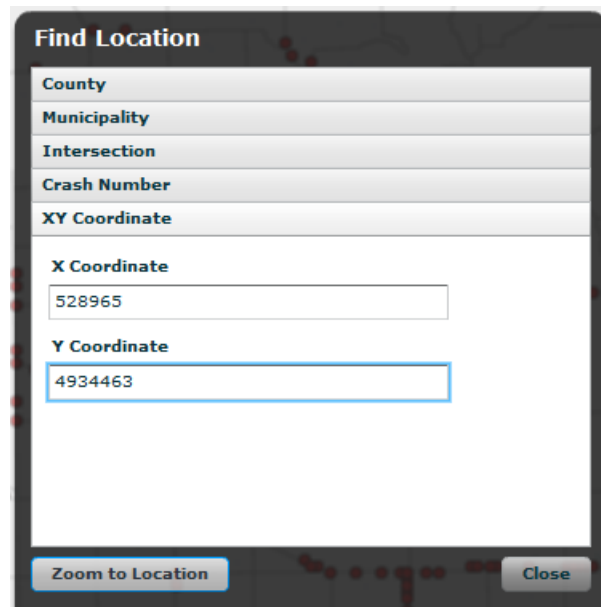
XY Coordinate

Zoom to Location Close

*Find Location Dialog – Crash Number*

## Find XY Coordinate

To Find an XY Coordinate, enter an X and Y value in meters.

A screenshot of the 'Find Location' dialog box, similar to the one above but with the 'XY Coordinate' section active. The 'X Coordinate' field contains '528965' and the 'Y Coordinate' field contains '4934463'. The 'Zoom to Location' and 'Close' buttons are at the bottom.

County

Municipality

Intersection

Crash Number

XY Coordinate
X Coordinate 528965
Y Coordinate 4934463

Zoom to Location Close

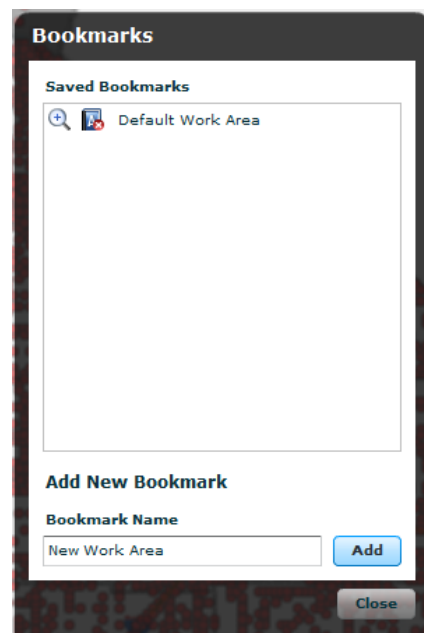
*Find Location Dialog – XY Coordinate*

## Bookmarks



*Bookmarks Button*

The Bookmarks tool allows you to save map extents so that you can return to them later. Click the Bookmarks tool, which will bring up the Bookmarks dialog box.



*Bookmarks Dialog*

### Add Book Mark

To create a bookmark, enter a name for the new bookmark and click Add. The current map extent will be saved and the new bookmark will appear in the Saved Bookmarks list.

### Zoom to Bookmark

To Zoom to a bookmark, click the Zoom In icon next to the Bookmark Name.

### Delete Book Mark

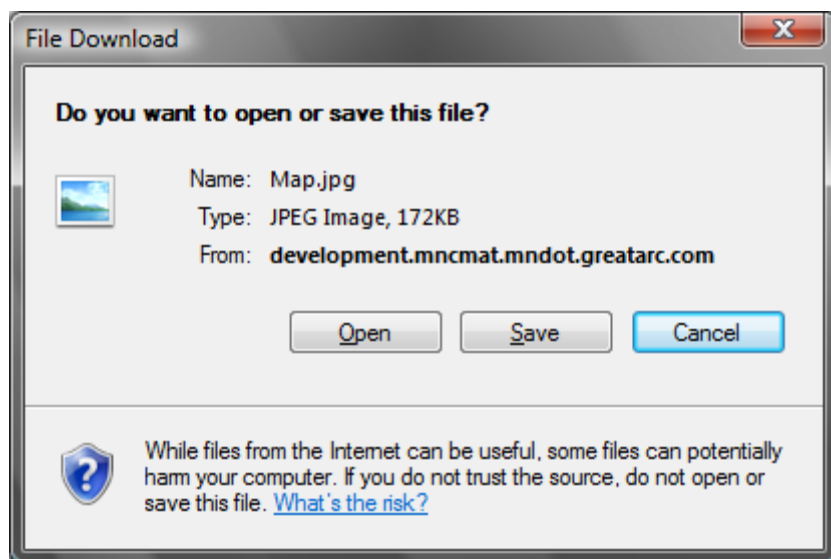
To Delete a Bookmark, click the Delete icon next to the Bookmark Name.

## Save Map Image



*Save Map Image Button*

Click the Save Map Image tool to export the current map display to a .jpg image file which can be opened or saved on your local computer. When the button is clicked, a new browser window opens and a dialog appears prompting for the image to be saved or opened.



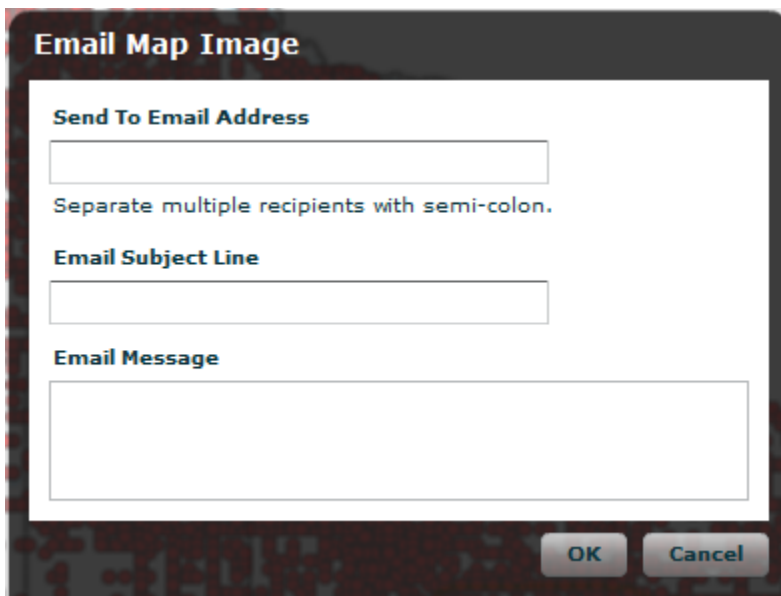
*Save Map Image File Download Dialog*

## Email Map Image



*Email Map Image Button*

Click the Email Map tool to export the current map display to a .jpg image file and email it as an attachment to the address(es) you specify. You can enter multiple email addresses separated by a semi-colon in the Send To Email Address box. Then, enter an email subject in the Email Subject Line and enter any desired text for the body of the email in the Email Message box. Click OK to send. The system will display a confirmation message that the email has been sent.

A dialog box titled "Email Map Image" with a dark header. It contains three input fields: "Send To Email Address" (a single-line text box), "Email Subject Line" (a single-line text box), and "Email Message" (a multi-line text area). Below the "Send To Email Address" field is a note: "Separate multiple recipients with semi-colon." At the bottom right are "OK" and "Cancel" buttons.

**Email Map Image**

**Send To Email Address**

Separate multiple recipients with semi-colon.

**Email Subject Line**

**Email Message**

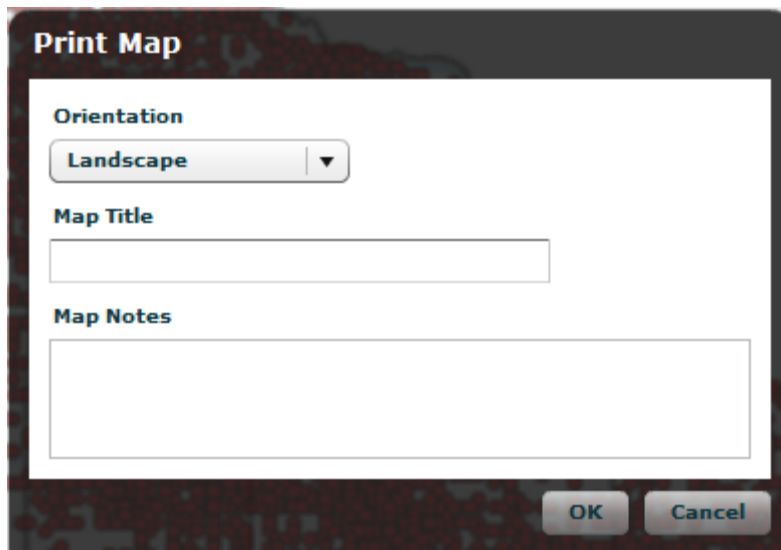
OK Cancel

*Email Map Image Dialog*

## Print Map

*Print Map Button*

Select the desired Orientation (Landscape or Portrait) using the drop-down menu. Enter a Map Title, and any Map Notes in the text boxes. Then click OK to print.

A dialog box titled "Print Map" with a dark header. It contains a drop-down menu for "Orientation" (currently set to "Landscape"), a "Map Title" single-line text box, and a "Map Notes" multi-line text area. At the bottom right are "OK" and "Cancel" buttons.

**Print Map**

**Orientation**

Landscape ▼

**Map Title**

**Map Notes**

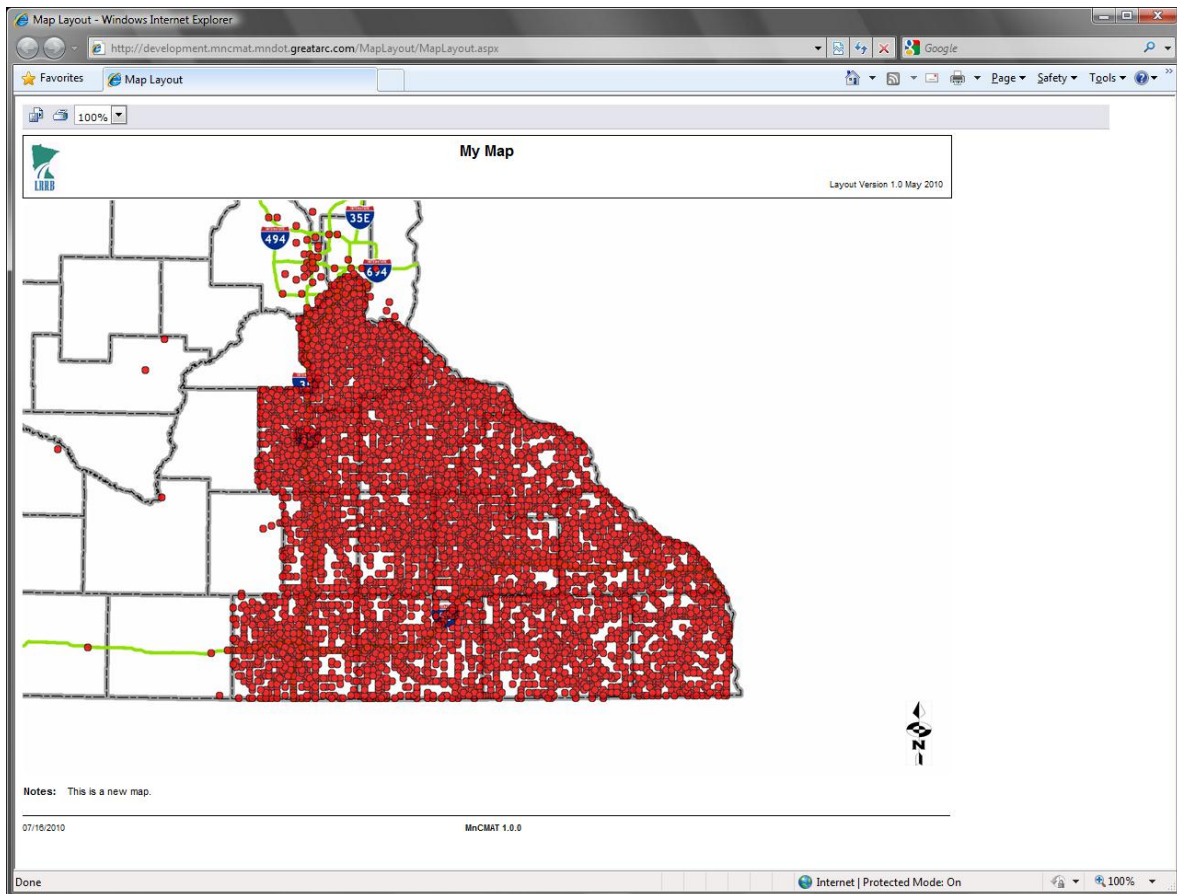
OK Cancel

*Print Map Dialog*

A new browser window is then opened with the map embedded in a Crystal Report. From there, choose either the Export Button, which will allow the Map to be saved to a number of formats or the Print Button, which will generate a PDF that can be saved or printed.



*Print Map Options Buttons*



*Print Map Window*

## Crash Data Toolbar



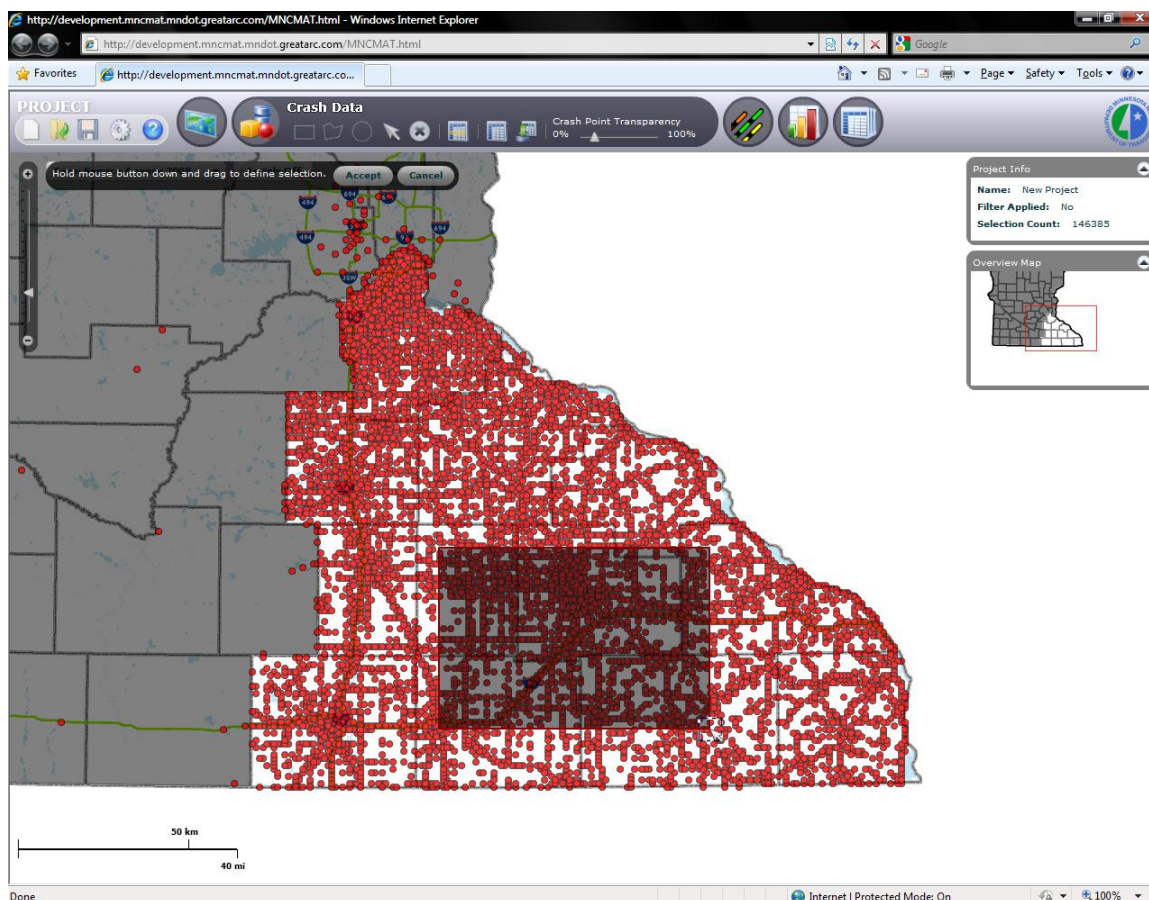
*Crash Data Toolbar*

## Select Crashes by Rectangle



Click the Select Crashes by Rectangle tool to begin. Then, click and drag on the map display to define a rectangle for selection. Once you have drawn a rectangle, you can either accept or cancel the rectangle.

Click Accept to proceed with the new selection set, or Cancel to discard the rectangle.



*Select Crashes by Rectangle*

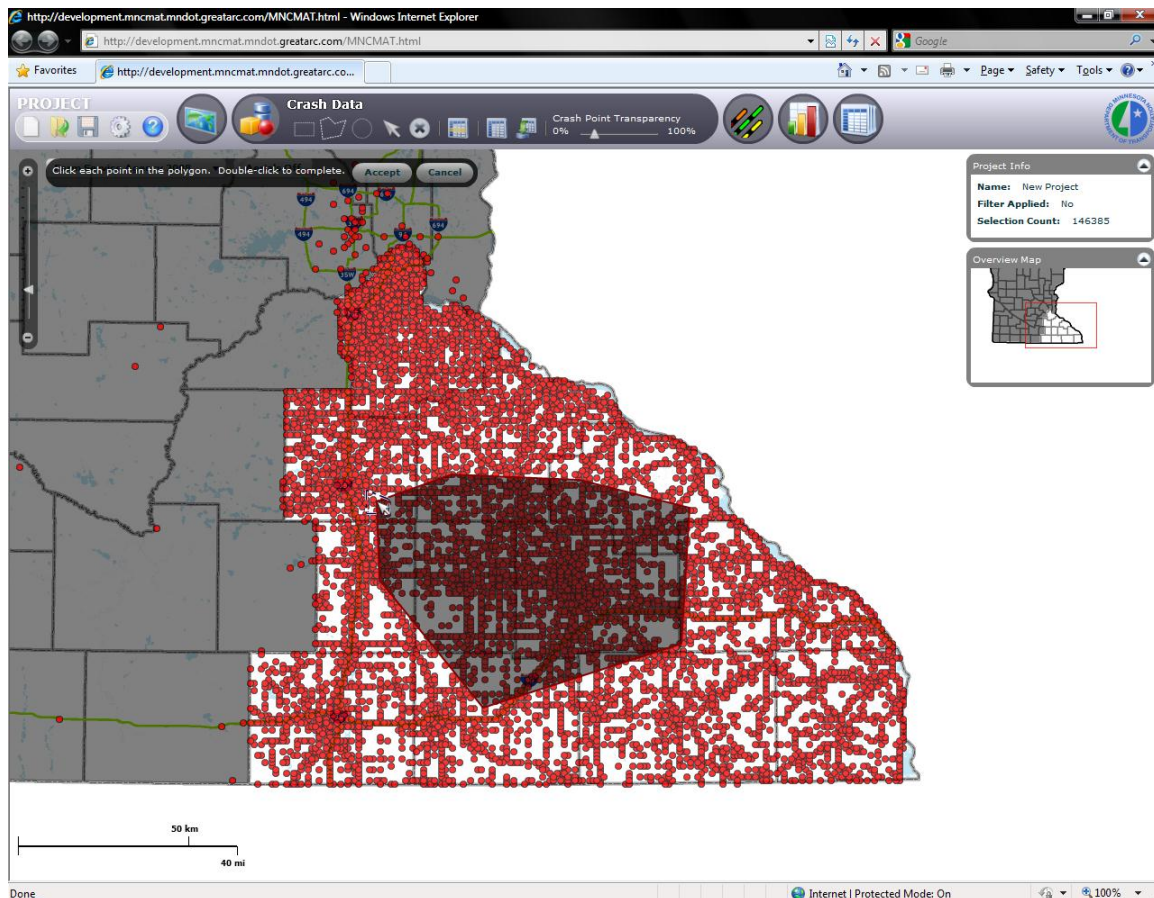
## Select Crashes by Polygon





Click the Select Crashes by Polygon tool to begin. Then, click on the map display to begin drawing a polygon for selection. Continue to click points to place vertices of the polygon; double-click to complete the shape.

Then, you can accept or cancel the polygon; click Accept to proceed with the new selection set, or Cancel to discard the polygon.



*Select Crashes by Polygon*

## Select Crashes by Circle

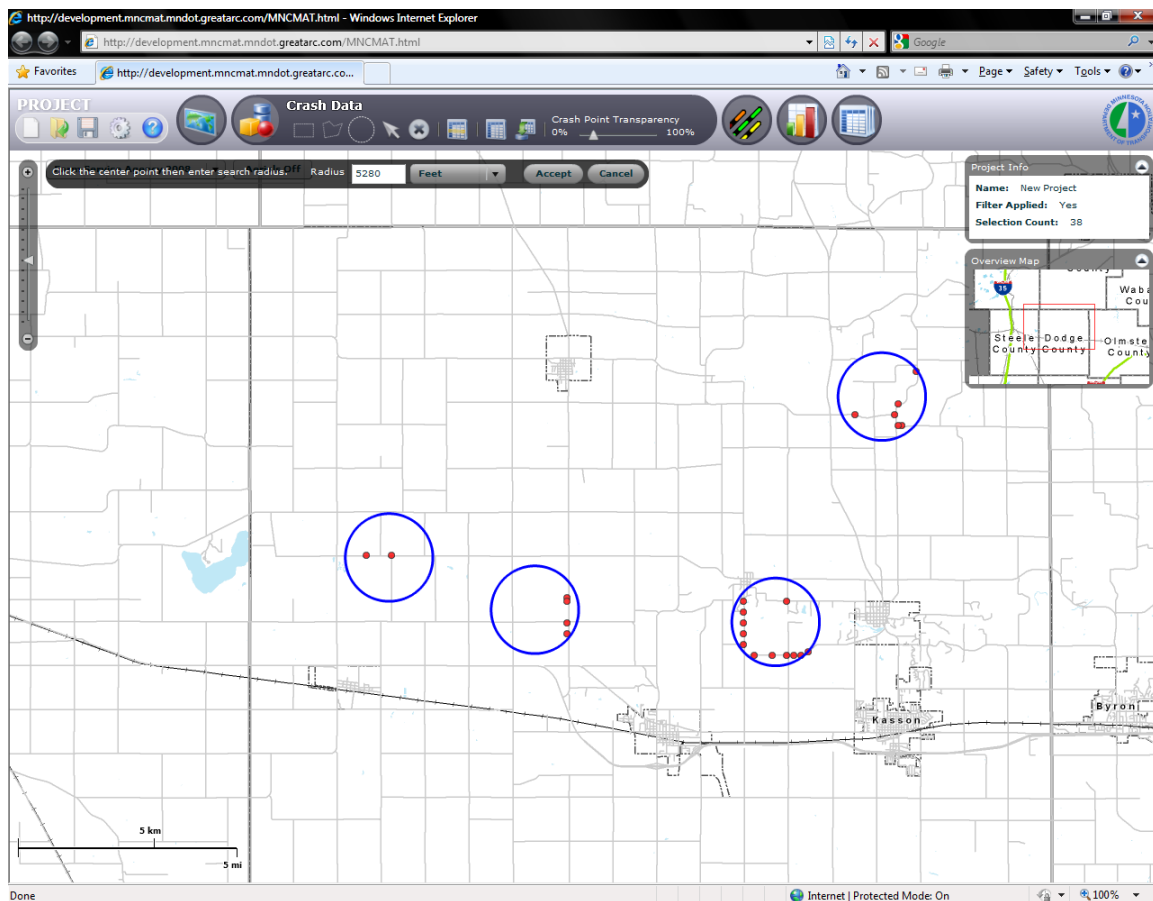


Click the Select Crashes by Circle tool to begin. Then, click on the map display to define the center point of a circle for selection. The center point will be shown with an 'X' on the map. Then, enter the desired radius in the box at the top of the map display and optionally choose the map units (feet, meters, kilometers, or miles).

Click the Accept button to draw the circle at the specified radius and make the selection, or click Cancel to discard the chosen center point.



Multiple locations for Circles can be clicked on the map.



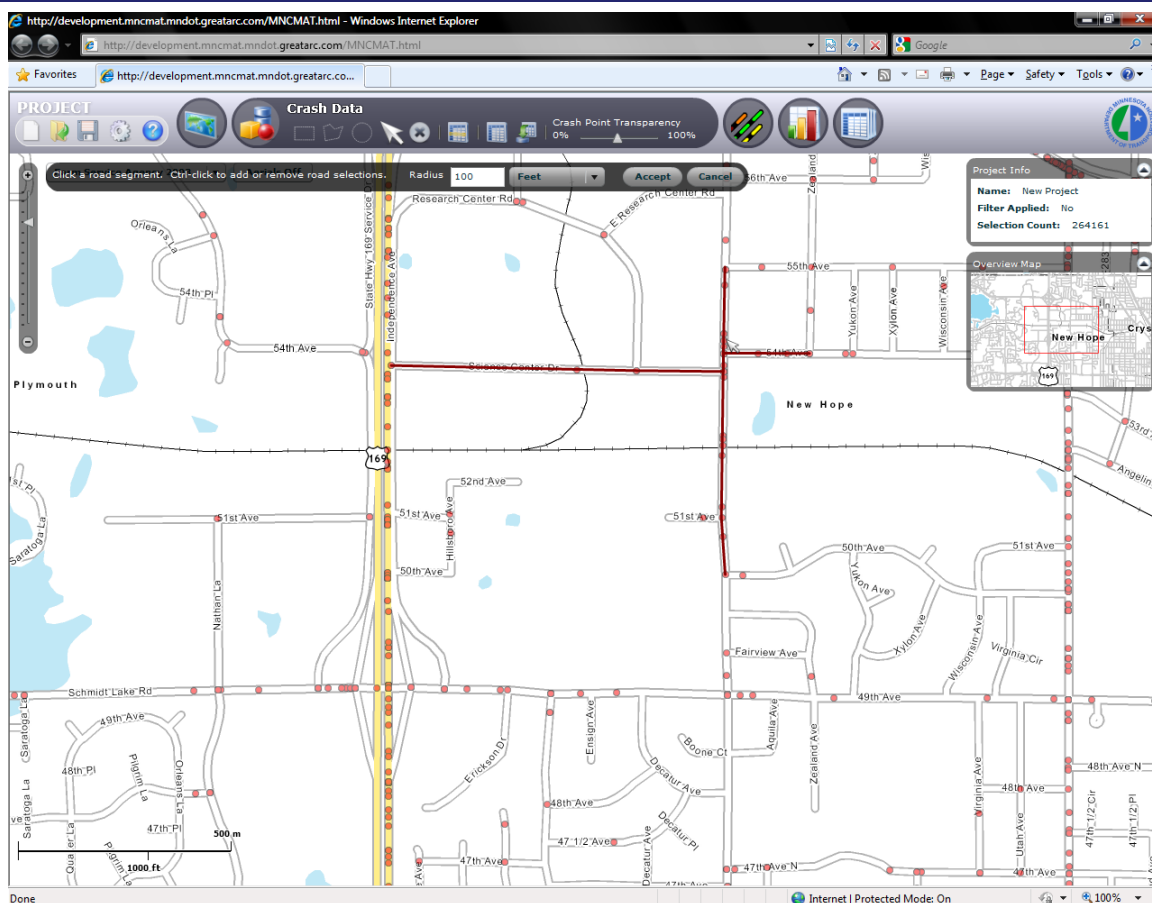
*Select Crashes by circle*

## Select Crashes by Road Segment



*Select by Road Segment Button*

Click the Select Crashes by Road Segment tool to begin. Then, click on a road segment on the map display to define a segment for selection. You can hold the Ctrl button and click more segments to add them to the selection set. Then, enter the desired radius in the box at the top of the map display and optionally choose the map units (feet, meters, kilometers, or miles). Click the Accept button to create the selection based on the current radius and road segments, or click Cancel to discard the selection.



*Select by Road Segment Options*

## Clear Spatial Selection



*Clear Spatial Selections Button*

Click the Clear Spatial Selection tool to remove all selections on the map.

## Crash Filters



*Crash Filters Button*

Click the Crash Filters tool to launch the Crash Filters dialog. Here, you can specify attribute filters to apply to the crash data in your work area. To add a filter, click it in the Available Filters list at the left. Then click the arrow button in the center of the panel to add it to the Selected Filters list. You can repeat this process to add as many filters as you need for the particular session. In the Selected Filters list, each attribute is unchecked by default. Click the box next to a particular attribute to activate it. As

you add multiple features, you can click the arrow symbol next to the filter name to minimize or maximize a particular filter. When you have finished setting up the filters, click OK to apply them.

## Crash Filters Dialog

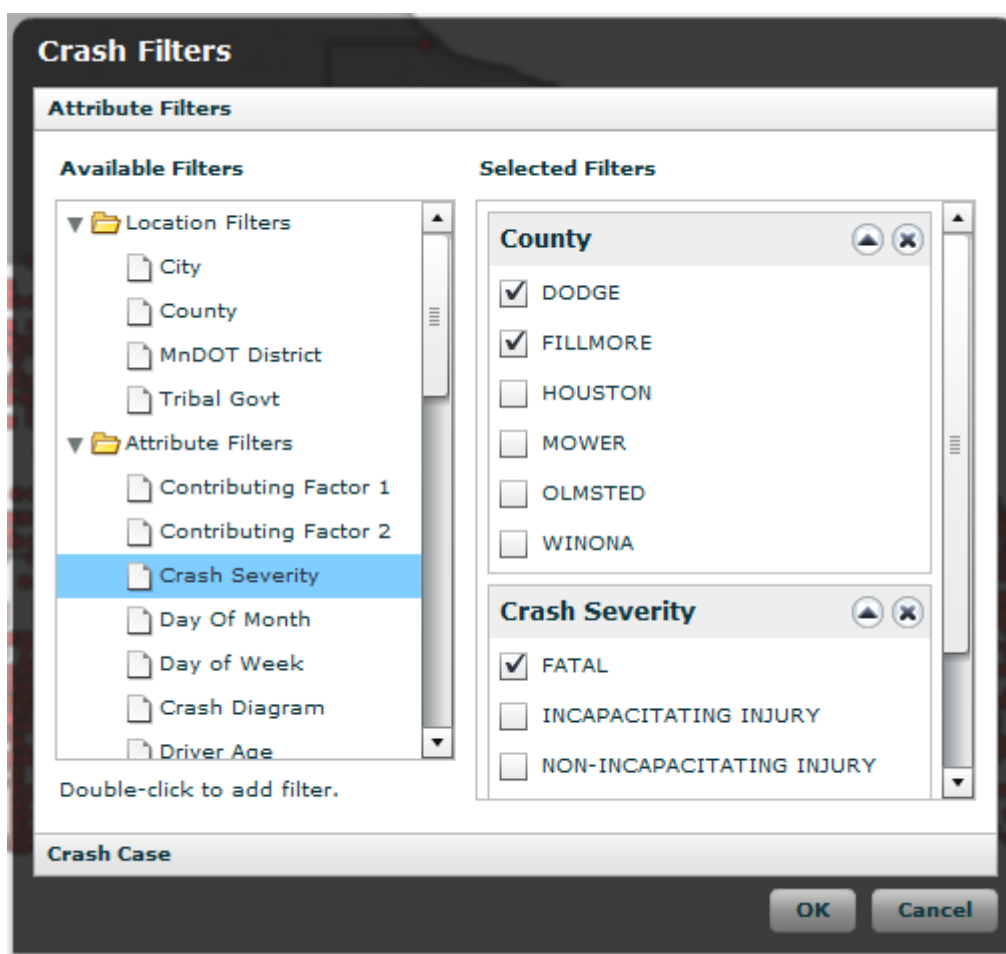
The Crash Filters Dialog is broken into two sections – Attribute Filters and Crash Case.

### Attribute Filters

In the Attribute Filters portion of the dialog, the Filters are broken out between Location and Attributes. The Location Filters allow users to Filter Crash Points based on a spatial entity. The Attribute Filters allow the Filtering of Crash Points based on Business Attributes.

To select a type of Filter to use, double-click the Filter in the Available Filters column. This will move the Filter and available Filter options (based on the Work Area) to the Selected Filters column. Filters can then be checked and unchecked in order to apply them.

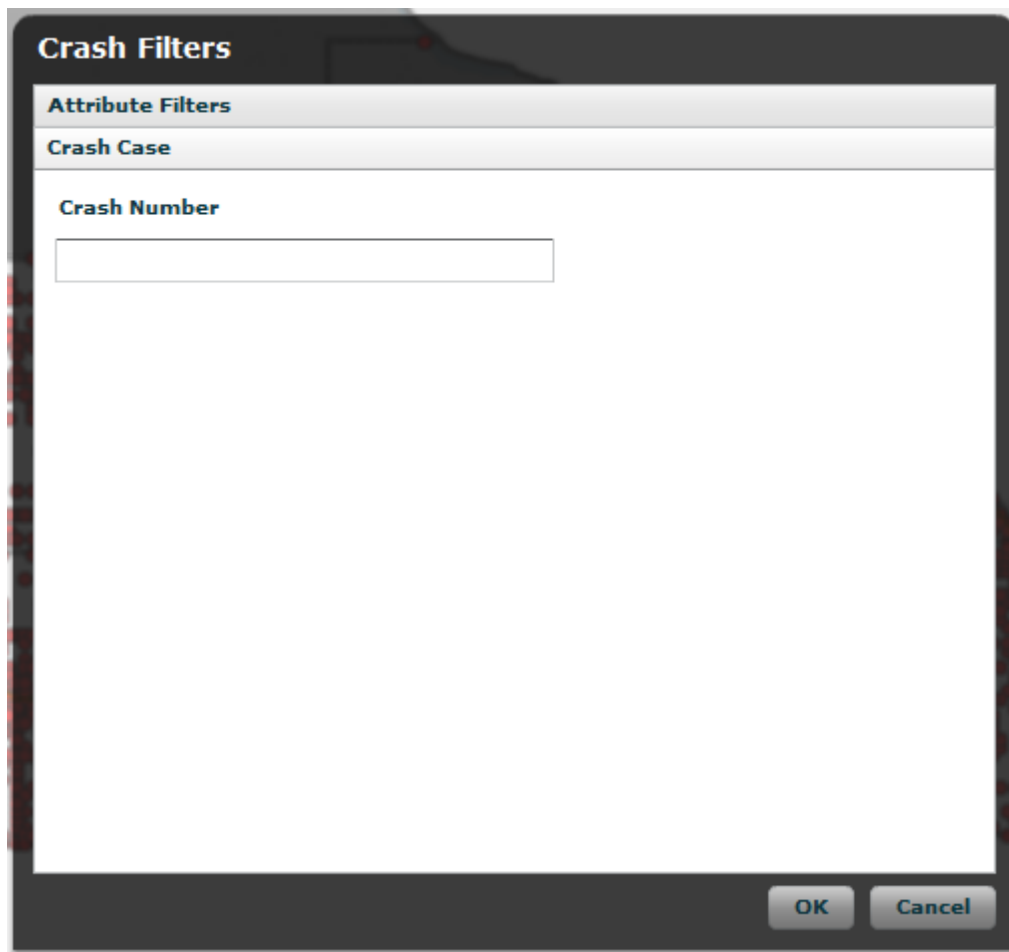
To Remove a Filter, click the “X” on the desired Filter to remove in the Selected Filters Column. The Arrow in the Selected Filters will minimize and maximize the Filter List.



*Crash Filters Dialog – Add Attribute Filters*

### ***Crash Case Number Filters***

In the Crash Number portion of the dialog, enter a valid Crash Number of the Work Area. If the Crash Number is not present in the Work Area that is being used, no results will be found.

The image shows a software dialog box titled "Crash Filters". It has a dark grey header bar with the title. Below the header, there is a section titled "Attribute Filters" in a light grey bar. Underneath, there is a section titled "Crash Case" in a light grey bar. Within the "Crash Case" section, there is a label "Crash Number" followed by a text input field. At the bottom right of the dialog, there are two buttons: "OK" and "Cancel".

*Crash Filters Dialog – Crash Case*

### **Show Crash Data**



Click the Show Crash Data tool to launch the Crash Data Display dialog. This panel defaults to the Data Grid view which provides a look at the attribute data for the selected records. The second view of the data is by Crash Number

Clicking on the Tab in the dialog toggles between the two Data Displays

**Crash Data Display**

**Data Grid** **Crash Details**

Sys	Route	Ref Point	Co	City	Dist	Trib
MNTH	00000001	284+00.177	ST LOUIS		D1 - DULUTH	
CSAH	69000100	011+00.791	ST LOUIS	AURORA	D1 - DULUTH	
USTH	00000053	072+00.374	ST LOUIS		D1 - DULUTH	
MNTH	00000169	415+00.216	ST LOUIS	BROOKSTON	D1 - DULUTH	
CNTY	69000246	001+00.038	ST LOUIS		D1 - DULUTH	
CSAH	69000005	020+00.540	ST LOUIS		D1 - DULUTH	
CSAH	69000009	007+00.870	ST LOUIS		D1 - DULUTH	
CSAH	69000004	008+00.060	ST LOUIS		D1 - DULUTH	
MSAS	10400194	000+00.359	ST LOUIS	DULUTH	D1 - DULUTH	
MNTH	00000001	258+00.943	ST LOUIS		D1 - DULUTH	
CSAH	69000077	001+00.860	ST LOUIS		D1 - DULUTH	
MSAS	10400170	001+00.000	ST LOUIS	DULUTH	D1 - DULUTH	
MNTH	00000061	029+00.022	LAKE		D1 - DULUTH	

☐ Show Database Values    Lock left 0 columns.    **Zoom to Highlighted Crash**

First Prev 1 to 100 of 298 Next Last Display 100 records. Close

Crash Data Display – Data Grid View Dialog

**Crash Data Display**

**Data Grid** **Crash Details**

**Case Numbers**

- 031830135
- 031880281
- 032300189
- 032460213
- 032760278
- 032760285
- 032620170
- 000060002
- 032850019
- 033070308
- 033460220
- 040130352
- 040220202
- 040300109

**Selected Filters**

Field	Value
Sys	MNTH
Route	00000001
Ref Point	284+00.177
Co	ST LOUIS
City	
Dist	D1 - DULUTH
Trib	
Crash Num	031830135
Month	JUNE
Day	18
Year	2003
DyWk	WEDNESDAY
Time	1400

☐ Show Database Values    **Zoom to Highlighted Crash**

First Prev 1 to 100 of 298 Next Last Display 100 records. Close

Crash Data Display – Details View

### Crash Data Display – Details View

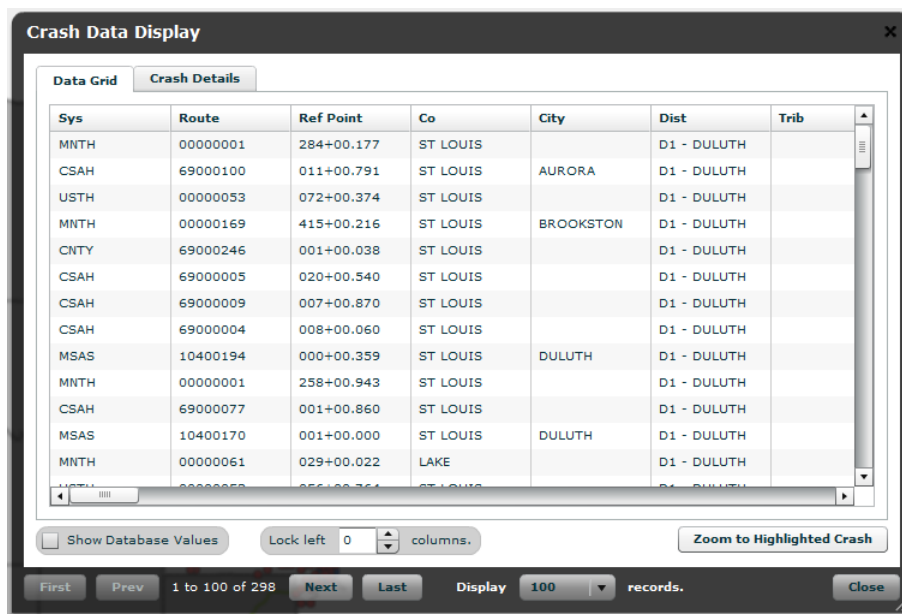
In the Crash Data Display – Details View – a number of options for displaying or using the data are available.

## Show Database Values

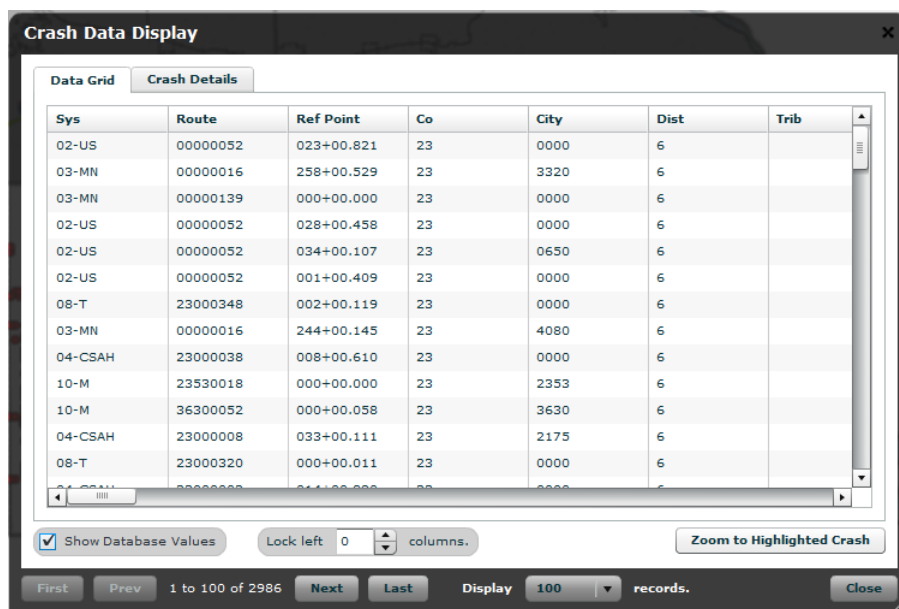


Show Database Values Button

By checking or un-checking this button, the Data Aliases or Database Values will be displayed in the Data Grid.

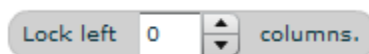


Data Aliases



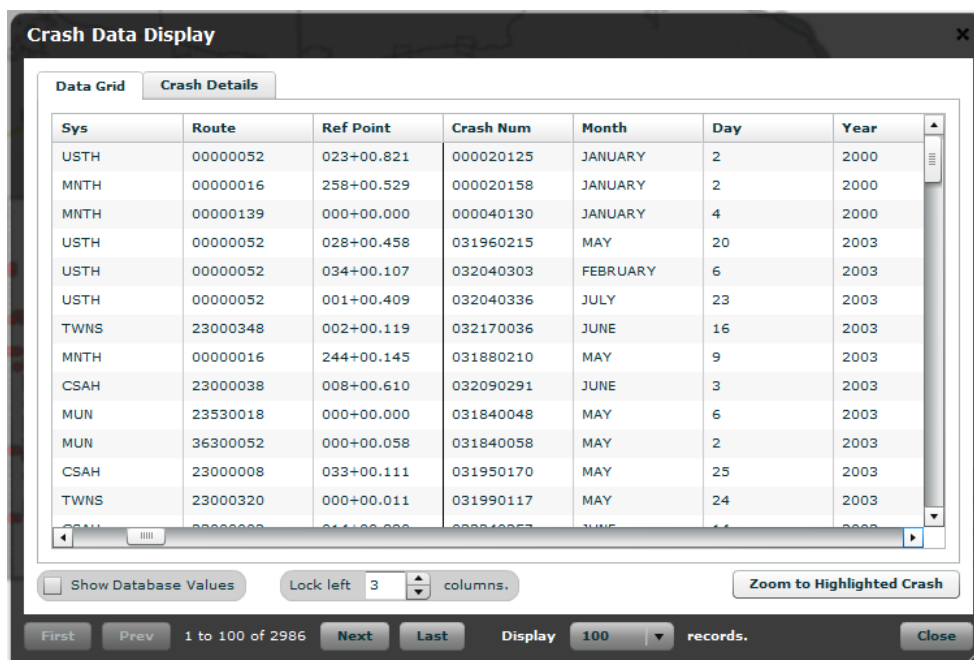
Database Values

## Lock Left Columns



*Lock Left Columns Option*

Increasing or Decreasing the number of columns in the option allows the data to be scrolled in the Data Grid, while those columns that are locked do not move.



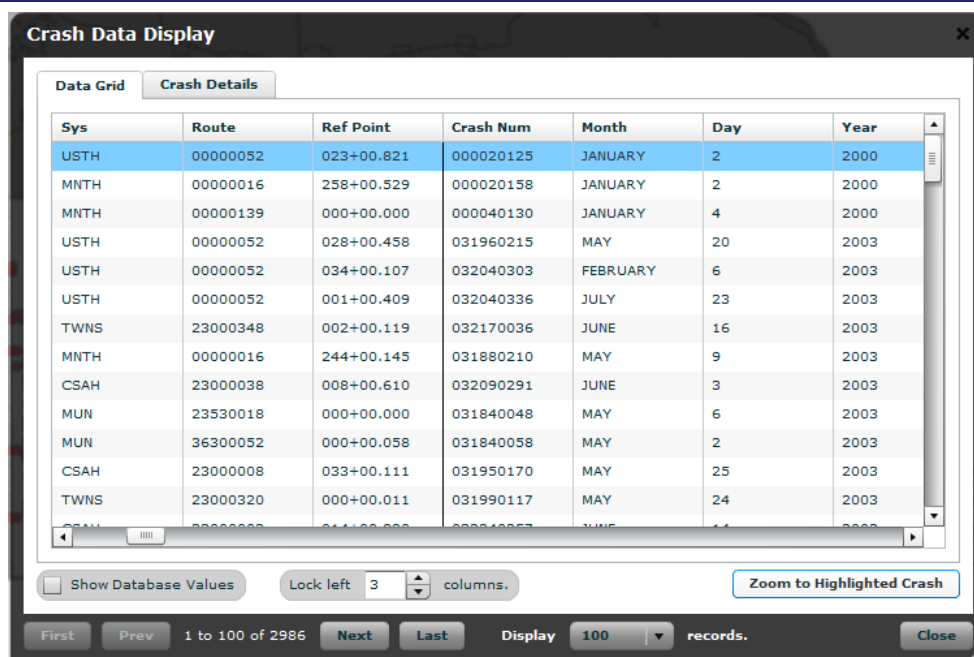
*Data Grid Column Locked and Scrolled*

## Zoom to Highlighted Crash



*Zoom to Highlighted Crash Button*

By clicking the Zoom to Highlighted Crash Button, the Map will zoom to the location of the crash that has been selected in the Data Grid.



**Crash Data Display**

Data Grid    Crash Details

Sys	Route	Ref Point	Crash Num	Month	Day	Year
USTH	00000052	023+00.821	000020125	JANUARY	2	2000
MNTH	00000016	258+00.529	000020158	JANUARY	2	2000
MNTH	00000139	000+00.000	000040130	JANUARY	4	2000
USTH	00000052	028+00.458	031960215	MAY	20	2003
USTH	00000052	034+00.107	032040303	FEBRUARY	6	2003
USTH	00000052	001+00.409	032040336	JULY	23	2003
TWNS	23000348	002+00.119	032170036	JUNE	16	2003
MNTH	00000016	244+00.145	031880210	MAY	9	2003
CSAH	23000038	008+00.610	032090291	JUNE	3	2003
MUN	23530018	000+00.000	031840048	MAY	6	2003
MUN	36300052	000+00.058	031840058	MAY	2	2003
CSAH	23000008	033+00.111	031950170	MAY	25	2003
TWNS	23000320	000+00.011	031990117	MAY	24	2003

☐ Show Database Values    Lock left 3 columns.    Zoom to Highlighted Crash

First    Prev    1 to 100 of 2986    Next    Last    Display 100 records.    Close

Zoom to Highlighted Crash

### Paging Results



Paging Results Options

For performance reasons, results in the Data Grid are paged. To navigate through the results, the Paging Results options can be used.

The First button moves the records to the first page of results.

The Prev button moves the records to the previous page of results.

The X to XXXX of XXXX displays the records that are present within the Data Grid.

The Next button moves the records to the next page of results.

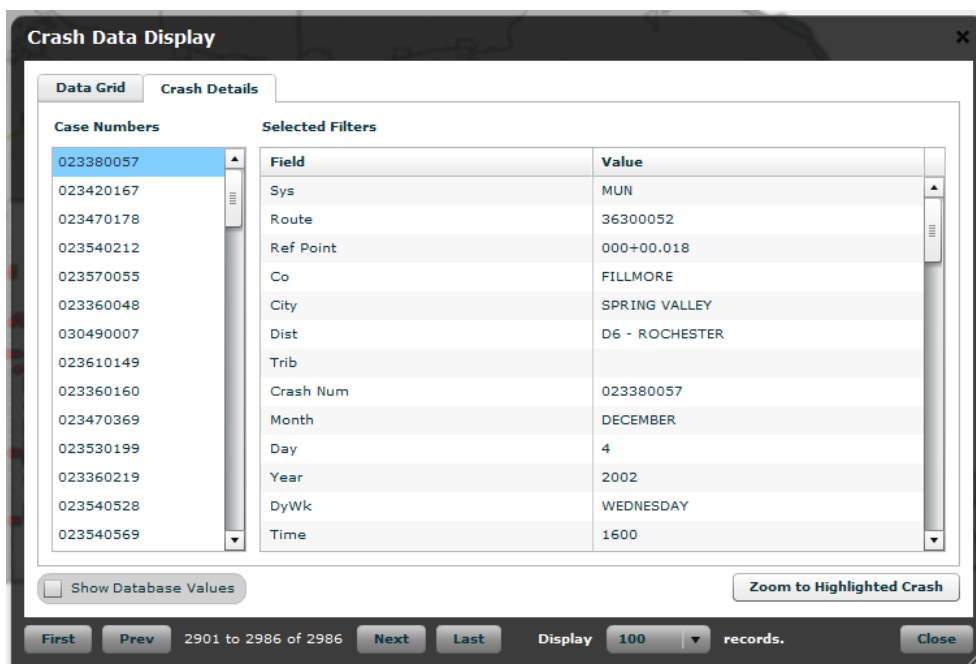
The Last button moves the records to the last page of results.

The Display XXX records allows the choice of paging records 100, 500, or 1000 results at a time.

### Crash Data Display – Crash Details View

Choosing the Crash Details View Tab allows a different view of the Crash Data. The orientation of the results is different and the Lock XX Columns option is removed, but the remainder of the dialog is the same as the Data Grid Display.





The screenshot shows the 'Crash Data Display' application window with the 'Crash Details' tab selected. On the left, a list of 'Case Numbers' is shown, with '023380057' highlighted. On the right, a table displays 'Selected Filters' for the selected case. The table has two columns: 'Field' and 'Value'. The fields and their corresponding values are: Sys (MUN), Route (36300052), Ref Point (000+00.018), Co (FILLMORE), City (SPRING VALLEY), Dist (D6 - ROCHESTER), Trib, Crash Num (023380057), Month (DECEMBER), Day (4), Year (2002), DyWk (WEDNESDAY), and Time (1600). At the bottom of the window, there are navigation buttons: 'First', 'Prev', 'Next', 'Last', 'Display', a dropdown menu set to '100', and 'records.', followed by a 'Close' button. A checkbox labeled 'Show Database Values' is also present.

Field	Value
Sys	MUN
Route	36300052
Ref Point	000+00.018
Co	FILLMORE
City	SPRING VALLEY
Dist	D6 - ROCHESTER
Trib	
Crash Num	023380057
Month	DECEMBER
Day	4
Year	2002
DyWk	WEDNESDAY
Time	1600

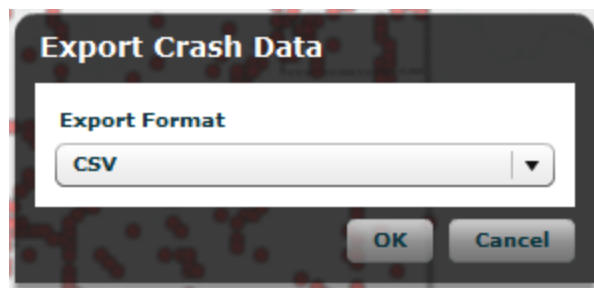
*Crash Data Display – Details View*

## Export Crash Data



*Export Crash Data Button*

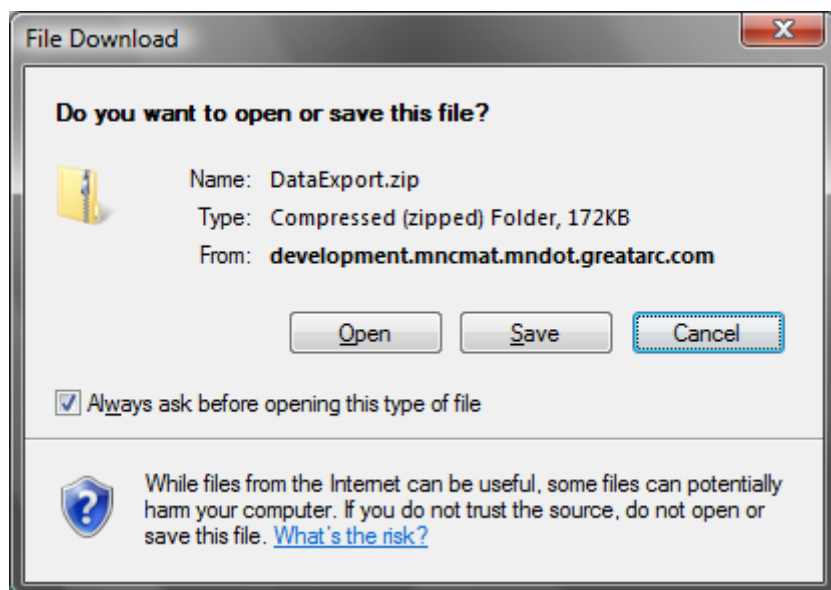
The Export Crash Data Button allows the currently selected features to be exported for use outside the MnCMAT Application. The Dialog allows for two options for exporting data (CSV and Shapefile). Choose the desired option and then click OK to begin the Export Process.



The screenshot shows the 'Export Crash Data' dialog box. It has a title bar with the text 'Export Crash Data'. Inside the dialog, there is a section labeled 'Export Format' with a dropdown menu currently set to 'CSV'. At the bottom of the dialog, there are two buttons: 'OK' and 'Cancel'.

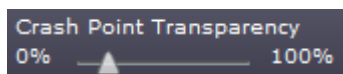
*Export Crash Data Dialog*

After clicking the OK button, a new Web Page opens, and once the process is complete, a new dialog for Saving or Opening the Data Export Results is presented.



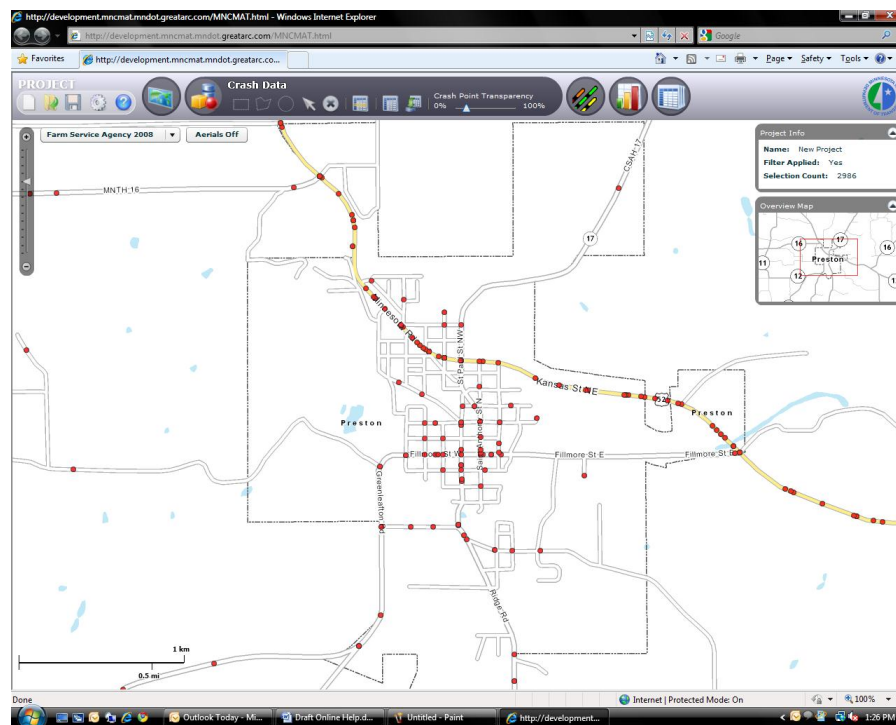
*Data Export File Download Dialog*

## Crash Point Transparency

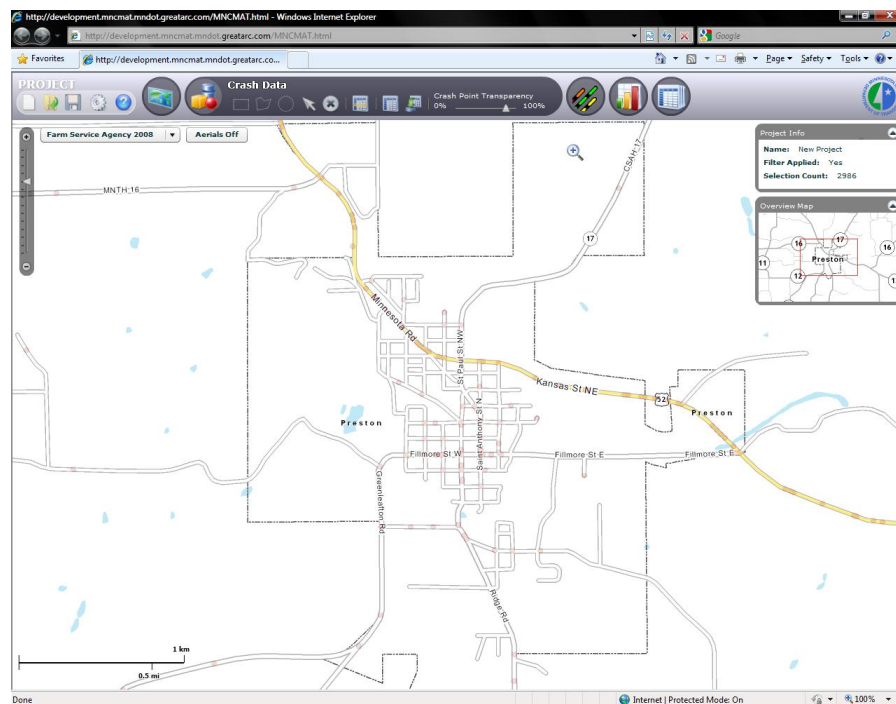


*Crash Point Transparency Option*

The Crash Analysis application allows you to set the transparency of the crash point symbols. Simply move the slider to the desired transparency and the display will automatically adjust the crash point symbols.



*Default Transparency Setting*

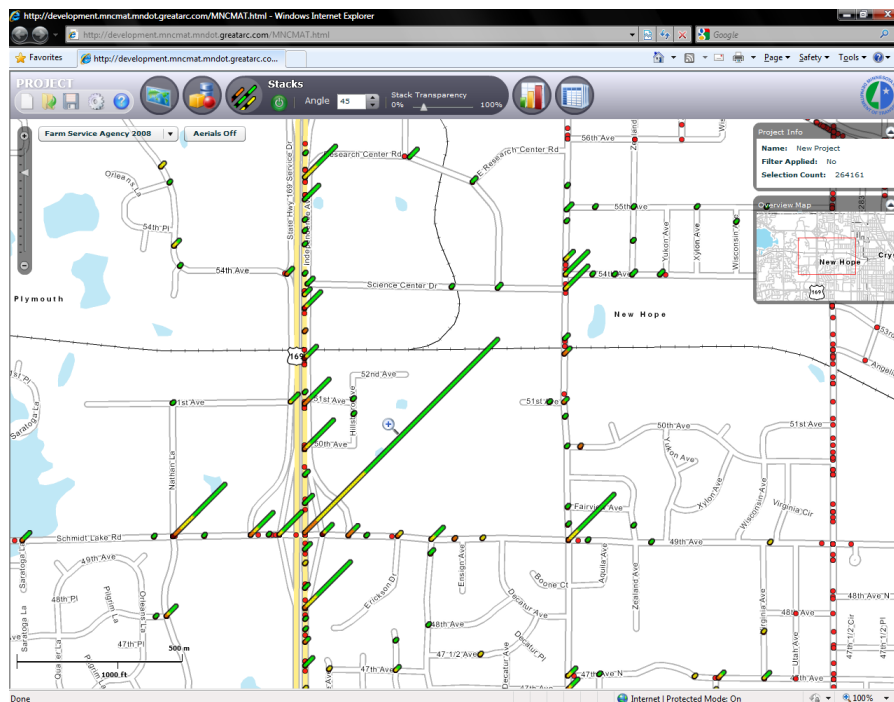


*Data at 85% Transparent*

## Stacks Toolbar



*Stacks Toolbar*



*Stacks Turned on in Map Interface*

## Toggle Stacks



*Stacks Off*



*Stacks On*

Crash Stacks are toggled on or off by clicking the button on the Stacks toolbar. The button is red when stacks are turned off and green then stacks are turned on. When turned on, stacks will display for the current selection set according to the current angle and transparency settings. Note: you must be zoomed in to the 1:8,000 zoom scale or closer to view stacks.



*Stacks Toolbar with Stacks not able to be displayed because of zoom level*

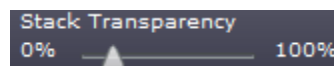
## Angle



*Stack Angle Option*

You can adjust the display angle of the stacks in five-degree increments from 0 to 180 degrees. Stacks will automatically update to show the new angle.

## Stack Transparency



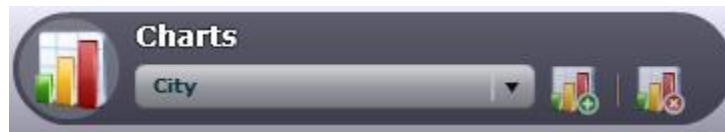
*Stack Transparency Option*

The Crash Analysis application allows you to set the transparency of the crash stacks. Simply move the slider to the desired transparency and the display will automatically adjust the stacks.

## Note

Please note that any Attribute Filters or Spatial Selections applied to the Crash Points are not applied to the Stacks.

## Charts Toolbar



*Charts Toolbar*

### Chart Type Drop-down

Use this list to select the type of chart to create.

### Add Chart

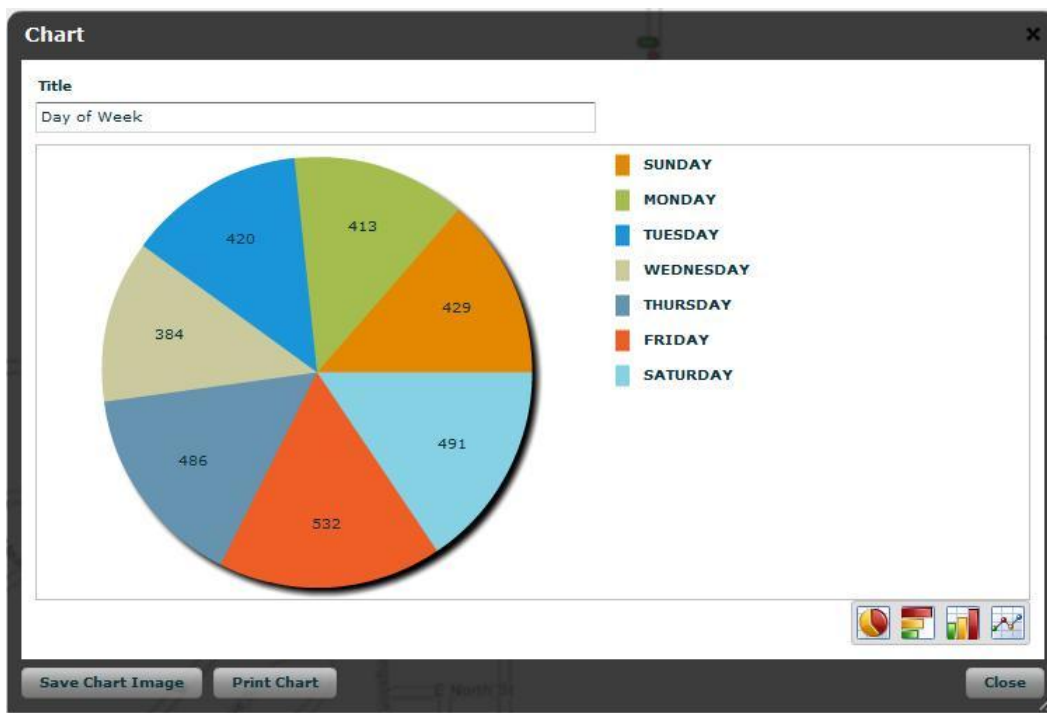


*Add Charts Button*

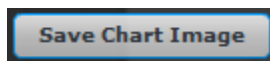
Click the Add Chart tool to create the selected chart. The Chart dialog will appear, and a chart widget will be added to the right side of the map display.

### Chart Dialog

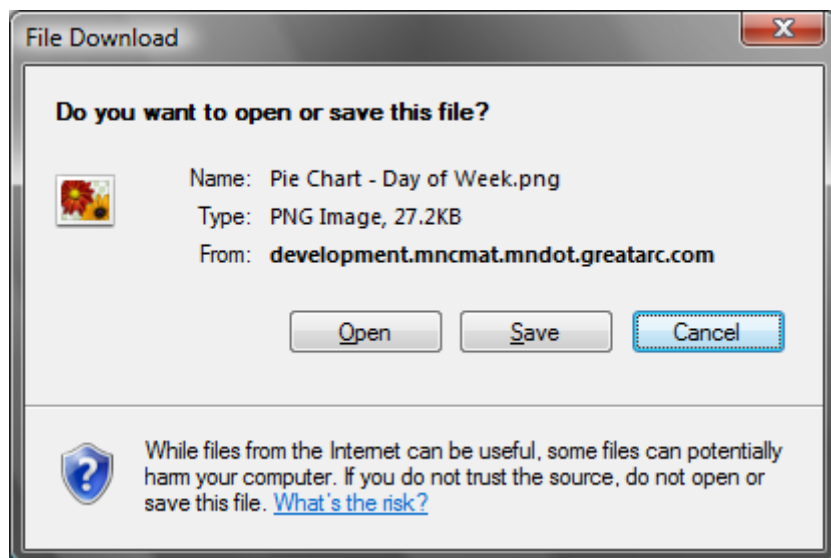
When you add a chart, the application displays the Chart dialog. You can set the title of the chart by typing in the Title box. You can also change the appearance of the chart, choosing from pie chart, bar chart, column chart, or line chart.

*Chart Dialog*

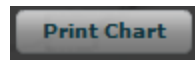
## Save Chart Image

*Save Chart Image Button*

You can save the current chart as an image by clicking the Save Chart Image button. A new browser window opens and once completed, a dialog prompts for either Opening or Saving the Chart.

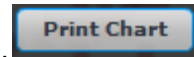
*Save Chart Image – File Download Dialog*

## Print Chart



*Print Chart Button*

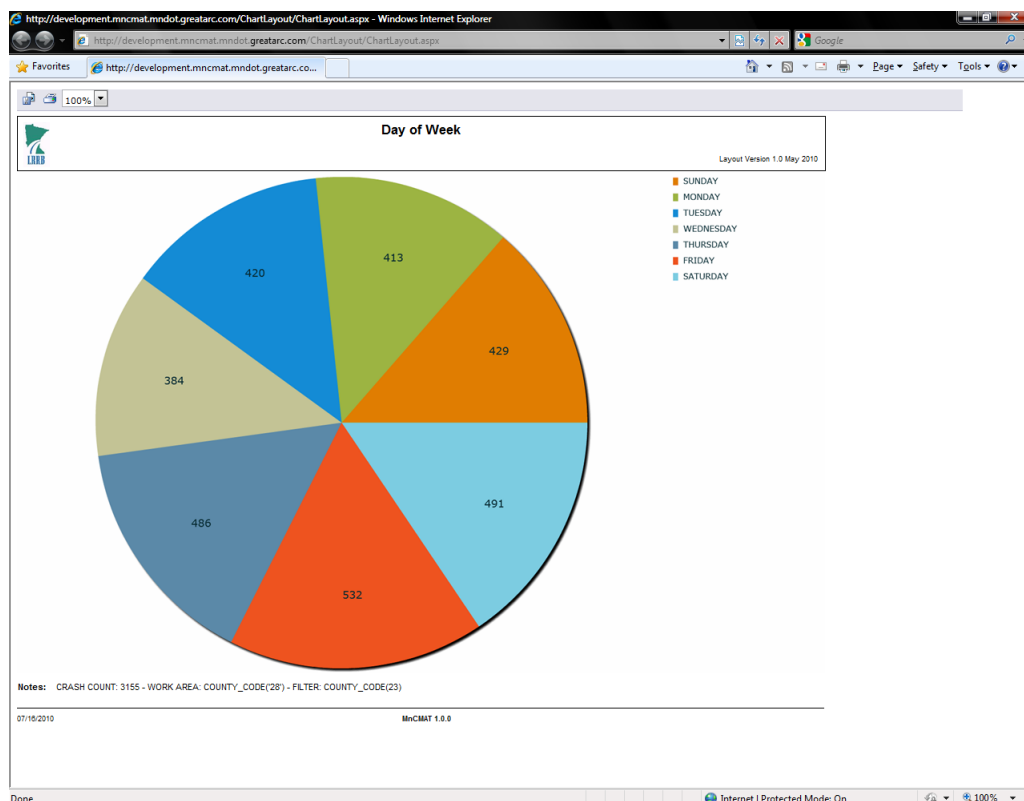
Click the Print Chart button to print the current chart. A new browser window opens with the Chart embedded in a Crystal Report that can then exported or printed.



*Print Chart Button*



*Print Chart Options Buttons*



*Print Chart Window*

## Chart Types



*Chart Types Buttons*

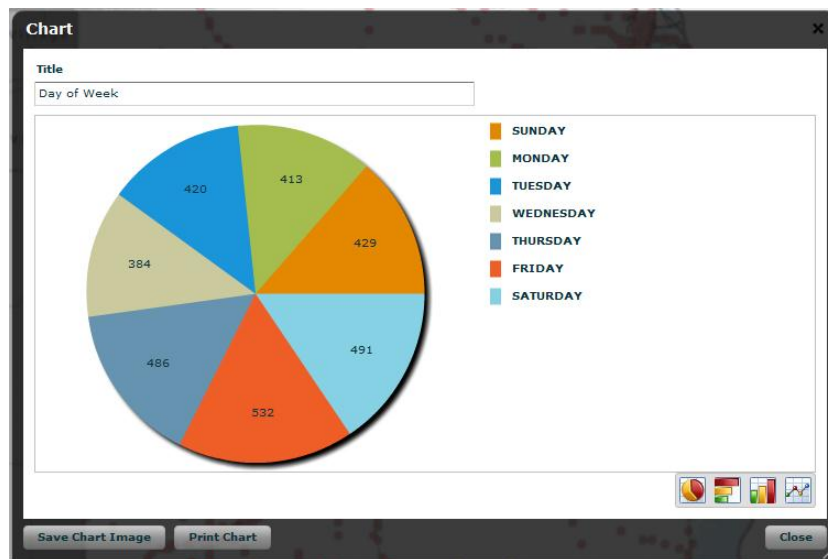
The Chart Dialog allows for the Chart Type to be changed for displaying the data differently.



## Pie Chart



Pie Chart Button

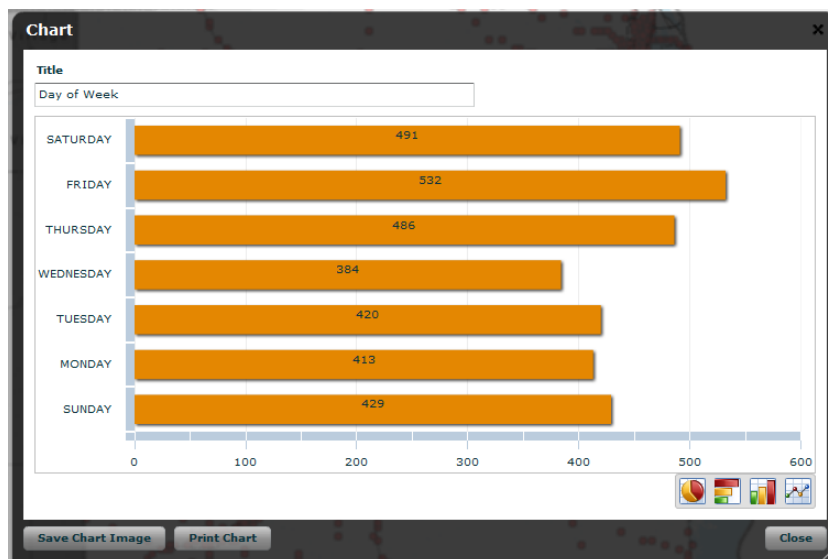


Pie Chart Display

## Bar Chart



Bar Chart Button

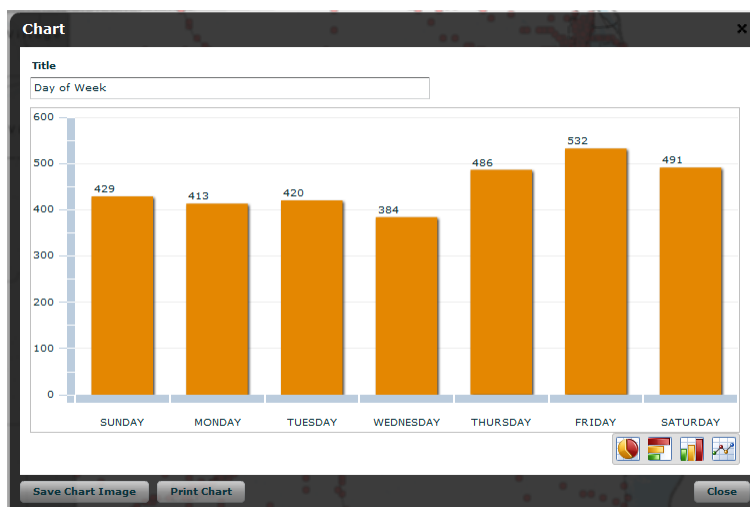


Bar Chart Display

## Column Chart



Column Chart Button

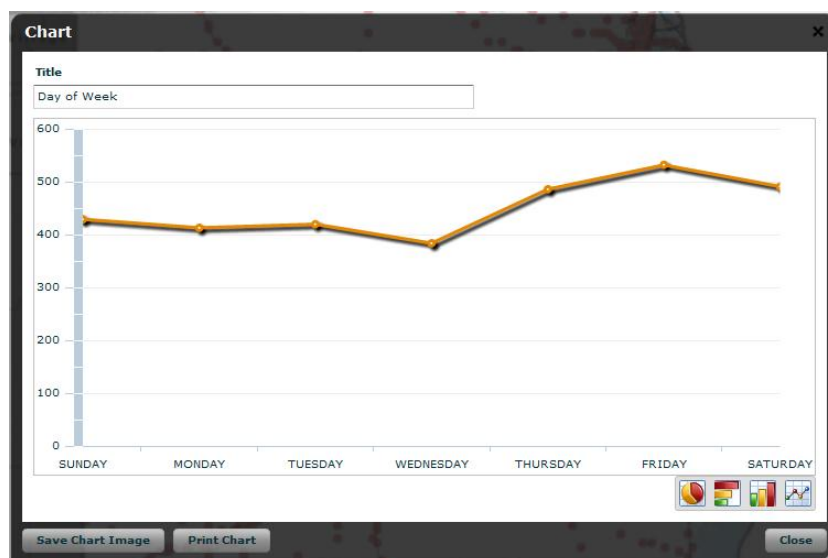


Column Chart Display

## Line Chart



Line Chart Button

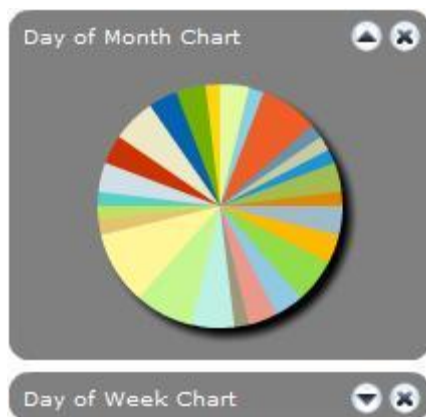


Line Chart Display

## Chart Widgets

Each time you create a chart, a chart widget is also created and placed along the right side of the map display. Chart widgets provide an easy way to keep track of recently-used charts. You can hover the

mouse over a widget to get information about the chart, and you can click a chart widget to expand and view the full chart. You can also click the arrow button to hide or show a widget, or click the X button to remove a widget. Also, if you make changes to the crash selection set or data filters, all chart widgets will automatically update to reflect the new data set.



*Chart Widget*

## Clear All Charts



*Clear All Charts Button*

Click the Clear All Charts tool to remove all of the current Charts and Chart Widgets.

## Reports Toolbar



*Reports Toolbar*

## Report Type Drop-down

Use this list to select the Report to generate.

## Execute Report

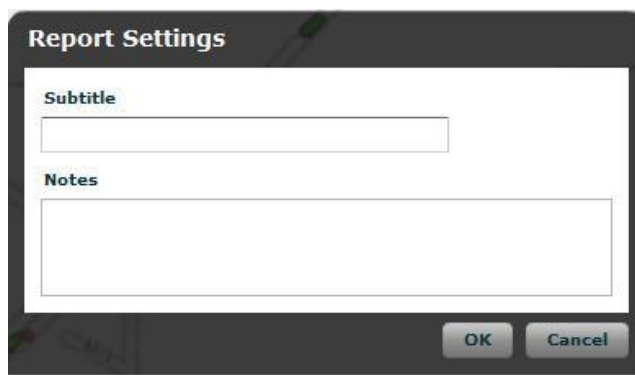


*Execute Report Button*

Click the Execute Report tool to create the selected report.

## Report Settings Dialog

When you create a report, the application displays the Report Settings dialog. You can set the Subtitle of the report and enter any notes into the text boxes. When you've finished typing, click OK to create the report.



*Report Settings Dialog*

## Report Window

The report will open in a new browser window. The report content will be based on the type selected, and will also display the subtitle and notes that were entered in the report settings and will display your email address as the analyst who created the report.

In the report window, you can export data, print the report, set the zoom level, and find text strings using the tools at the top of the report.



*Report Options Buttons*

Crash Case Number Listing - Windows Internet Explorer

http://development.mnrcmat.mndot.greatarc.com/reports/CrashCaseNumberListing.aspx

Crash Case Number Listing

Crash Cases

Report Version 1.0 Jan 2010

Sys	Route	Ref Point	Co	City	Acc Num	Date	Sev	Diag	# Veh	Time	Lit	Surf
04-CSAH	28000011	004+00.160	28	0000	000010074	01/01/2000	N	04	1	1600	01	05
03-MN	00000076	006+00.391	28	0000	000010190	01/01/2000	B	98	1	1100	01	01
04-CSAH	28000006	001+00.700	28	0000	000020285	01/02/2000	A	07	1	1700	04	05
08-T	28000169	000+00.111	28	0000	000020286	01/02/2000	N	07	1	1400	01	05
08-T	28000169	000+00.111	28	0000	000060202	01/06/2000	C	04	1	2100	03	05
04-CSAH	28000009	002+00.000	28	0000	000090137	01/09/2000	B	07	1	0000	06	01
04-CSAH	28000016	003+00.340	28	0000	000090183	01/09/2000	C	07	1	0300	06	90
04-CSAH	28000009	002+00.080	28	0000	000110529	01/11/2000	B	04	1	2500	06	05
04-CSAH	28000004	000+00.111	28	0000	000110559	01/11/2000	N	99	1	0000	06	05
03-MN	00000026	019+00.888	28	0000	000120175	01/12/2000	N	99	2	0700	01	05
03-MN	00000044	052+00.456	28	0555	000140116	01/14/2000	N	05	2	1800	05	01
04-CSAH	28000025	010+00.250	28	0000	000160057	01/16/2000	N	05	1	0800	01	01
04-CSAH	28000003	011+00.379	28	0000	000170106	01/17/2000	N	07	1	2100	06	02
10-M	05550004	000+00.111	28	0555	000180324	01/18/2000	N	01	2	2500	04	90
03-MN	00000016	284+00.104	28	0000	000200090	01/20/2000	N	08	2	0800	01	03
05-MSAS	20700108	000+00.111	28	2070	000200317	01/20/2000	N	05	2	1200	01	05
10-M	18400001	000+00.111	28	1840	000200364	01/20/2000	C	09	3	2200	04	01
05-MSAS	20700107	000+00.111	28	2070	000200402	01/20/2000	N	05	2	0900	01	05
03-MN	00000016	284+00.104	28	0000	000200514	01/20/2000	C	05	2	0800	01	03
02-US	00000061	001+00.676	28	2070	000200540	01/20/2000	N	05	2	1400	01	03
04-CSAH	28000005	014+00.111	28	0000	000240275	01/24/2000	N	07	1	0600	06	03
03-MN	00000016	288+00.371	28	2070	000240296	01/24/2000	N	05	2	1600	01	01
10-M	05550016	000+00.111	28	0555	000260006	01/26/2000	C	05	2	1600	01	02
03-MN	00000076	007+00.897	28	0000	000320035	02/01/2000	N	01	2	0700	01	01
03-MN	00000044	053+00.155	28	0555	000330108	02/02/2000	C	08	2	0700	01	01
10-M	20700038	000+00.111	28	2070	000330219	02/02/2000	N	99	2	2500	99	01
10-M	05550070	000+00.111	28	0555	000340053	02/03/2000	B	01	2	0100	04	01
04-CSAH	28000025	012+00.120	28	0000	000340337	02/03/2000	N	99	1	2100	06	05
04-CSAH	28000021	009+00.111	28	0000	000350281	02/04/2000	N	99	1	1700	03	01

Done

Internet | Protected Mode: On

Report Window

## Top 100 Reports

Two new reports have been added to the system. The following section describes each of these reports.

### Top 100 Road Segments

The Top 100 Road Segments report works off of an existing user selection. To generate results it counts the total number of selected incidents on each road segment and displays the highest counts in descending order. A road segment is a length of road extending from one intersection to the next.

### Top 100 Intersections

The Top 100 Intersections report works off of an existing user selection. To support this report, all crashes within a specified distance are associated with an intersection. Therefore the report query only need to perform a simple grouping based on the intersection field and sort by count. By default it is set to 25 meters.